THE HEALING MACHINE

by

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STATEMENT OF DISSERTATION APPROVAL

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ABSTRACT

The compositions in *The Healing Machine* are assemblages of archival and invented documents, narratives, meditations, and language. Formally, they are assembled from fragments, capitalizing on the human impulse to connect unlike things, to see patterns and invent coherent narratives where they may not exist.

Section I contains lyric essays that connect personal with public history. Documents are channeled through and distorted by my particular vision. In "Endnotes to a Seizure," I extend dictionary definitions (e.g., of "seizure" or "Scintillating Scotoma") into associative or metaphorical definitions. "As a Bitch Paces Round Her Tender Whelps…" consists of love letters that collage "high" and "low" diction, juxtapose Homer with contemporary slang, and meditate on the way metaphors—like love—embody the impossible fusion of unlike things.

The stories in Section II blur fiction and nonfiction, often employing the form or text of documents as scaffolding. "Real Silk" features invented characters, but includes snippets from professional development pamphlets written for 1930s silk stocking salesmen. Conversely, some stories in Section II invert this relationship between document and character, featuring historical characters but invented documents. "This Precarious Hive" purports to be a biopic of an artist duo, but neither artists nor document have veracity. In such works, I both rely on and undermine the authority of recorded historical narratives.

The stories in Section III, about a dentist and his wife in the early twentieth century, also use documents as scaffolding, but in this section, I create a multifaceted, polyphonic history that emphasizes the story over fact.

In the title story of this collection, a man builds a "healing machine" in his shed using found materials. He believed this haphazard *wunderkammer* healed disease by conducting electricity through the body. While this seems unlikely, I find that even photographs of the "machine" provoke wonder and perhaps—through language, observation, and communication—heal less tangible malaise. The compositions in this collection resemble his arrangements of salt vials and Popsicle sticks, and I hope the formal, aesthetic, and thematic relationships that emerge between them invite consideration of how and why unlike things cohere as narrative within a text or texts.

Postmodernism establishes, differentiates, and then disperses stable narrative voices (and bodies) that use memory to try to make sense of the past. It both installs and then subverts traditional concepts of subjectivity; it both asserts and is capable of shattering "the unity of man's being through which it was thought that he could extend his sovereignty to the events of the past."

---Linda Hutcheon and Michel Foucault, *Historiographic Metafiction*

The word in language is half someone else's. It becomes 'one's own' only when the speaker populates it with his own intention, his accent, when he appropriates the word, adapting it to his own semantic and expressive intention.

--Mikhail Bakhtin, *The Dialogic Imagination*

Give us a bedlam of stars in the night sky and we will birth Andromeda, Draco, Virgo.

--Lance Olsen, [[*There.*]]

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I. ESSAYS

THE PIGMENT IN THE WALL

Madonna del Parto

Once, in a museum in Monterchi, Tuscany, I stood before Piero della Francesca's *Madonna del Parto,* which hung behind a protective sheet of plexiglas. The Madonna's robe was deep blue. To paint it, della Francesca used a great deal of lapis lazuli, ultramarine, imported from Afghanistan, a fact I had learned in art history class in college. That day in Italy, my boyfriend and I stood silently before the painting, a fresco removed from its original building, a church that had been damaged in an earthquake, and then removed again and housed in the museum that bore its name.

The Madonna's forehead was high and broad. Her were eyes downcast. One hand rested on her hip in the manner of a pregnant woman supporting the weight of a growing child, countering the pressure on her back. Her other hand parted her ultramarine gown with two long fingers, offering a glimpse of her belly, swollen with the infant Christ. Angels flanked and framed her, holding open a scarlet curtain that mirrored the gap in the Virgin's gown, as if she were on stage. The painting was the shrine containing her.

Eggs Are a Binding Agent

The tempera paint common in classical paintings was made of egg yolks mixed with pigment. But when I look at a painting of saints and angels, of the Virgin in her blue robe, an awkward, adult-looking Christ child on her knee, gold leaf and

ultramarine and carmine, painted rows of manicured shrubbery, I don't think about eggs, or that the pigments are mixed with one half of the genetic material that could have been a chicken or a duck. I don't think about how, instead, those proteins became color on canvas or plaster.

Lapis Lazuli

In art history class, where I learned about lapis lazuli, my professor had been young, with frizzy, curly hair. As is the case in art history classes, her lectures were accompanied by slides, the lights of the classroom dimmed. The class met after lunch, and despite her engaging lectures—full of anecdotes—I often grew sleepy. To keep myself awake, I drew in the margins of my notebooks. Simple faces with closed eyes, their long eyelashes burdened by weights hanging from strings. When my professor showed us images of flying buttresses—those sturdy architectural supports that brace the high walls of the Notre Dame cathedral—I drew tiny winged buttocks. Sometimes I dozed off.

The last time I saw my art history professor was at a "blue party," a goodbye party where the host projected blue slides onto the wall of the house next door. We all wore blue and drank blue drinks. And there was my professor, dancing in a tight blue dress. Late in the night, I leaned woozily against a doorframe and watched her lick blue frosting off of the bare back of the guest of honor, the woman we were bidding farewell.

Opportunity Cost

My boyfriend had lived in Italy before we met in Colorado. He had lived for a year or two with an Italian woman and her family. I had seen a photo of this ex-girlfriend's sister holding a baby at her hip and gently biting its fat cheek, and another of her mother in a floral housedress burning brush in their backyard. After we had been dating for about six months, he returned to Italy.

Before I joined him, I worked for a few months in Ireland, baking bread on Friday nights and serving coffee during the days. I lived in a drafty flat on a street called Nun's Island, between a Catholic School and a river that ran on the other side of our moss-covered wall. But I left Ireland to join my boyfriend in Italy, first flying to Paris, where the train workers were on strike. I slept on the floor of the train station until I could catch a train out of the city. My plan was Barcelona, then Florence. But in Paris, I began to panic. I called my boyfriend and sobbed something into the phone. Maybe it was something about how the station was full of American students—it was early summer. Somehow this paralyzed me, my status as a member of a group that I both feared and found obnoxious, my status as a cliché. I was overwhelmed. I could get on any train to anywhere. To *anywhere*. It didn't matter. There was no set path I had to follow.

Just get on the train, my boyfriend said. His voice was coming to me from so far away. *Come to Italy.* His voice was real, I supposed. He was real somewhere.

I got on the train and sat on the floor beside an old woman with a bird in a covered cage and I went to Barcelona, and then, after a couple of days, I got on another train and rode it along the Mediterranean coast (turquoise water, white plaster, laundry in the sun).

In Florence, my boyfriend met me at the station.

Fireflies, the Woods

To see the painting by Pierro della Francesca, I rode shotgun in a borrowed car. My boyfriend drove along the winding Tuscan roads. Out the window, I saw mattresses in the woods. Prostitution is legal in Italy, but brothels are not, and neither is solicitation in a public place, or pimping of any kind. Prostitutes are called *lucciole,* fireflies. Once, on an evening train from Florence to Arezzo, I watched transfixed while the *lucciole* prepared for work. They laced the backs of each other's shirts, applied lipstick and powder and mascara, spritzed themselves with perfume. The mattresses in the woods were striped and stained and soggy, like old newspapers in the matted leaves.

How to Slice a Tomato

In Italy, we worked in the kitchen of a school where students from Texas, Colorado, and California studied art and architecture. The work was easy, setting tables for the students and faculty, carrying out bowls of steaming pasta and bottles of cheap wine. The women who ran the kitchen were middle-aged Italians, Giuliana and Lidia. I learned "kitchen Italian" (spoon, platter, numbers) but I could not talk with them much. Lidia laughed at the way I ate kiwi, which involved scooping the fruit from its skin like pudding from a dish. Lidia taught me to properly slice a tomato by standing behind me and circling my body with her arms. She held my hands, and I held a small, serrated knife. Gently, she said, in Italian, and together we held the tomato against the cutting

board. Together we sawed so carefully through the fruit. The teeth of the knife were necessary for breaking the skin, for slicing smoothly.

To Name a Thing

The Madonna del Parto is a common subject in Italian Renaissance painting. The pregnant Madonna, the holy mother waiting for the birth of her child. In such depictions, the Madonna often rests a closed book upon her swollen belly, a symbol of the Word incarnate—Jesus, God made flesh.

In the beginning was the word.

God said, *Let there be light*, and there was light. God said, *Let there be dry land, let there be oceans*, and there was land and there were oceans. He spoke the animals into being, and he spoke Adam into being, and he tasked Adam with naming the animals. And if Adam called a beast "lion," it was a lion, and if he called it "snake," it was a snake. So the Hebrew God was a writer, using words to create a world. And for Christians, Jesus is language embodied, like a tangerine or a loaf of bread.

Call Me Dinner

In Italian, "Mary" is "Maria," my middle name. My grandmother was named Mary, and so is my mom. It is my older sister's middle name, while mine is Marie, and my younger sister's is Meara. Maria is the name I should have used when I was in Italy, but I had this idea, unarticulated, that my name and my identity were inseparable. I thought that I had a firm, unique self even in a place where I could not communicate beyond *Where is the bathroom?* And *I'd like a glass of wine, please.* That people would

speak my name and know me, my moods and my musings, my history and hopes. So I went by my first name, Shena (Shay-nah).

In Italian, "ce" is pronounced like the English "ch," but the Tuscan accent softens it to the English "sh". And so my name sounded like *cena,* dinner. *Pleasure to meet you. My name is dinner.* The Tuscans that I met shook my hand, then paused and repeated my name back to me, with the raised inflection of question. *Cena?*

When I spoke my name, Italians knew that I did not speak the language well, if at all. Perhaps they thought I was funny, or a tease. They knew nothing about me, and without language I could not paint a self for them, be a self, be a person. Without language, I was a young American woman with pale skin, brown hair, and a boyfriend who spoke better Italian than me.

Wild Boars, A Hillside

My boyfriend and I slept on the hillside in an olive grove because we wanted to eat in a particular restaurant in a neighboring town, a restaurant where they served all kinds of *bruschetta*. The buses and trains stopped running early, so would not finish our dinner in time to return to our own town. We brought sleeping bags, and after dinner, we climbed over a stone wall, wandered a little way down the hillside, settled into our sleeping bags, and fell asleep overlooking a cemetery where candles burned in the mausoleums.

I did not know to fear *cinghiale,* wild boars that might have snuffled wildly through the undergrowth and stumbled on our sleeping bodies. *Cinghiale* are covered with wiry black hairs and are delicious when roasted and added to pasta with cream

sauce, but alive they are fierce animals that fatten themselves on mushrooms and roots and berries. They are not like domesticated truffle hogs, pale and pinkish, with an innate ability for sniffing out truffles.

In the morning, the sun grew hot and we woke and climbed back up to the town and caught a bus home. Like so many Tuscan towns, Cortona was built on a hilltop, so the people in the city could see approaching enemies.

Beyond the Sea

Why did the painters of the Renaissance choose blue for Mary's robes and the robes of angels? Why not gold, or red, or green? Ultramarine pigment was made with pulverized lapis lazuli mixed with oil and purified through a complicated straining process. It was incredibly expensive since lapis lazuli was imported from beyond the sea. And "ultramarine" seems to refer to the quality of the color more than to the origins of the pigment— a blue from beyond, the blue of the deepest sea, the infinite blue of sky, the transcendent blue of dawn or twilight. And so Mary wears blue? It seems backward: economics made blue holy, instead of holiness making it expensive. Lapis lazuli was also used to paint the brows of Tutankhamen's sarcophagus, the brows of King Tut.

History: Blue

The first book I read on the color was William Gass' *On Being Blue,* a meditation on the color that lends itself best to melancholy, and is, he writes, "most suitable as the color of interior life*."* Then Rebecca Solnit's *A Field Guide to Getting Lost,* in which Solnit considers, between chapters, "the blue of distance," that line at the horizon toward

which we are always moving. And then it was Maggie Nelson's *Bluets,* a book of fragments like wildflowers, a trail of tart-sweet berries, or the breadcrumbs scattered by Hansel and Gretel as they wandered into the forest, so famously eaten by birds (lost, again).

And blue is [just] a certain speed of light. But it is the speed of lovely things: winter bright sky and a night with gleaming constellations, water, ink on porcelain, and enameled camping cups. The cyanotypes of Anna Atkins, those ghostly imprints of algae and ferns, roots and petals made by sun and chemicals washed in water. Swimming pools and oceans. It is the color of barely remembered films, faded photos, carnivals on summer nights, growling music.

History: The Convent

At the school in Italy, students and faculty ate in a large dining room, but staff ate in the kitchen, near an arched window that overlooked the valley. After dinner, I would stand at the window and watch the swallows diving from the roof, plummeting and rising, slicing the air in smooth arcs, the sky fading to pink behind them.

The school was in an old convent. There was a story that my boyfriend and I told each other, about a nun and a priest that loved each other—passionately, carnally, despite their vows—and the nun, tormented by guilt and desire, finally leapt from the bell tower to her death. I can no longer remember if the story was our elaboration on the actual history of the place, or if we invented it entirely.

Multiple Choice

When I consider the story of the Holy Mother, I begin by entertaining two possible narratives. In the first, everything is (miraculously) true. God impregnates Mary, filling her body immaculately with the Word incarnate, and then sending an angel to break the unlikely news. This, too, is a common subject in Renaissance paintings: the Annunciation. Mary on her knees, the angel Gabriel hovering, one hand out in greeting and benediction, or simply to calm her, since the real live appearance of an angel would, of course, be terrifying.

This is the literary version, the fantasy/sci-fi version, the version that requires faith and imagination, the version in which words make things happen. And what a terrible gift—to be a pregnant virgin. Who would believe it?

In the other version, the scientific version, Mary is necessarily a liar. She either lies to Joseph, or to everyone else. Either Joseph is the father of her child, or some other man is. And then this version splinters into more possibilities:

1. Mary and Joseph, not yet married, rush into each other's bodies, driven by desire. They lie to remain "good kids."
2. Despite her betrothal to Joseph, Mary loves another man, and in that hopeless love she gets pregnant. She lies to protect the man she loves, or to protect her unborn child, or to protect Joseph from feeling betrayed. She lies to protect herself.
3. Or maybe, she rushes into the body of a man that is neither Joseph nor a man that she loves, but simply a man whose body she craves.

4. Or a man takes advantage of Mary—rapes her—and in shame or fear, she lies. In this version, too, I imagine Mary's terror.

In these versions Mary is not a Virgin, but could—in my book—still be the Mother of God. After all, in this story God is willing to take human shape, to grow in a uterus, to squeeze his way along the birth canal and emerge as a bloody and gasping human baby. Why not have a human father, too?

Homesickness: The Apron

When I washed dishes at the school, I wore a rubber apron. I loved the invincibility it provided, the weight and smooth texture of it. It was the costume of a Worker—it felt like something one would wear for work dirtier than dishwashing. To shovel slag, or rinse the blood from the floor of the slaughterhouse.

Lidia and Giuliana did not work on weekends. Instead, on Saturdays, one of us kitchen staff would slice bread and fruit and set Nutella and butter and jam and the students would filter down to the dining room whenever they felt like it. We would make them cappuccinos or espressos or lattes, and then we would wash the dishes and the kitchen floor. When it was my Saturday, I always turned up the volume on Bruce Springsteen's album *Born in the USA*, and I washed the floors wearing the rubber apron, dancing with the mop, longing for a motorcycle on some New Jersey road that I had never seen.

History: The Pigment in the Wall

Piero della Francesca painted his *Madonna del Parto* on the wall of a country church, but in 1785, an earthquake cracked the wall and damaged the structure of the building. The fresco was detached and rehung in a tiny cemetery chapel. In 1992, it was moved again, this time to a museum named in its honor. This is where I saw it.

Fresco painting doesn't require a binding agent to be mixed with the pigment—no glue or egg yolk—because it is done when the plaster is still damp. Pigments are dissolved in water and applied directly to the wall so that the painting becomes part of the wall—it is not *on* the surface, but *in* it. And so removing a fresco means removing the top layers of plaster. To do this, art restorers press a layer of cheesecloth against the painting and coat it with water-soluble glue. Then another layer of cheesecloth is pressed against the painting and coated with glue. Layer after layer of cloth and glue are pressed to the wall. They are left to dry for months, the cloth binding to the plaster. Then, the surface of the wall is removed, pulled away with the layers of cloth and glue, and leaving behind a crumbly blank. The painting that was an integral part of it is now stuck to the layers of cloth. New plaster is applied to the back of the painting, and then it is pressed to a new surface. Hot water is poured over the face of the painting, over the layers of cloth and glue, and the layers begin to peel, one by one, like sunburned skin, until the fresco remains, pressed to its new wall, or to canvas. This method for removing a fresco is called the *strappo* technique. *Strappo* means ripping or tearing.

Striptease

Della Francesca's Madonna del Parto has a long neck and fair skin, and a halo rings her head like a balanced basket. Her forehead is high, her hair held back with elaborate twists of white cloth, making her appear almost bald. High foreheads were considered beautiful during the Italian Renaissance. They're everywhere in paintings from that era—of Venus, of the Virgin Mother, of Duchess patrons. I cannot find an explanation for why this was considered beautiful, but in the case of the Madonna del Parto, it makes her look strangely youthful, almost like an infant, tender-cheeked, vulnerable, and bald.

The fingers of her right hand part her gown. The shapes of her fingers are awkward, bending strangely, and the hand appears a bit too wide for the fingers, but there is delicacy, a lightness of touch, despite the awkward forms. There is something erotic in the gentle parting of the gown, the teasing of the layers beneath.

Roland Barthes writes that the eroticism of striptease is in the barriers of clothing that hide the woman's nakedness. The cigarette holder, the furs, the feathers—these provoke the viewer, and enforce the idea that *nakedness* is a woman's natural state.

We wrap ourselves in clothing for protection and for warmth. But even during infancy we are clothed—in pinks and blues, blankets and bonnets and booties, in our given names, in the expectations of our families. And none of these are natural. We inhabit them, like flannel shirts and earrings and embroidered cotton bloomers. We inhabit such expectations like we inhabit our bodies. It can be so difficult to peel them away, and when we do, what is left?

Two Layers of Cheesecloth

I cannot remember much about the first two times that boyfriend and I had sex, but they were my first two times. I say two times, because I always discount the first time, trying to erase it, to consider it a rehearsal. Let the second time be the first.

The second time, we were staying in a *pensione* on the coast, and waves crashed against the rocks below. The waves were deep blue, he was patient, and the sex was awkward and unsatisfying. I didn't know how to move my body with his, against his. Yet this second time, with the waves and the coast, is the one I am writing about, the better memory of two hazy memories. There are no rehearsals. Or every time is rehearsal. Or every rehearsal is also a performance. The cheesecloth, the costumes, the pigments all mashed together.

Come With Me

If you transfer the painting to a new wall, what becomes of the old wall? A part of it goes with the painting—the painting *is* the wall. They are not separate entities. But the rest of the wall, the part without the paint, is destroyed or replastered, repainted. The new wall, the surface that receives the old painting, becomes a collage of times and places.

Storm

After we looked at the *Madonna del Parto*, we drove the borrowed car to the top of the town and looked across another valley full of olives and grapes. My boyfriend set up his 8x10 view camera. I took a photo of him with a point-and-shoot. He was perched at a bend in the stone wall, one foot on each side of an angle, the tripod legs balancing

with him, the camera lens aimed at the patchwork land. But before he could meter the scene or compose a photo, it began to rain torrentially. He could barely break the camera down before our clothes were stuck to our skin, soaked through and translucent. In the photo I had snapped, the storm was at our backs, the sky he looks at is pale and bright, and all the leaves are glimmering.

Calluses

On the last day of the summer semester, Lidia grilled steaks over an open flame in the yard below the courtyard, overlooking the valley. She flipped the meat with her bare hands and the smoke drifted off around her. When she went inside to check on some other dish, she left me clumsily turning the steaks with a metal spatula, my hands far too tender for the heat of the grill.

Palimpsest

Once upon a time, the plaster in the wall was plain. But by the time a fresco is removed, the pigment has long been one with the plaster. It seems as if the wall has always held the image.

I cannot tell which woman is the negative space and which holds the pigment. Which woman holds the cigarette and which is a child, a painter, a nude. Which is the writer, and which calls herself dinner. Am I the woman who danced with the mop while listening to Springsteen, the swallows swooping off the roof of the convent where a nun once jumped to her death? And the one who waited tables in Denver and Washington

D.C. and Bowling Green, Kentucky? Am I the one who once believed, with something that felt like certainty, in God?

It has been 14 years since I was in Italy, nothing compared to the number of years since Piero della Francesca painted his Madonna del Parto into the damp plaster of a tiny Tuscan church. For a time, I was a swimmer. For a time, a Christian. A student, a photographer, a kitchen worker, an American. I am a writer, (teacher, editor, reader). Daughter, sister, ex-girlfriend, wife. I am not (yet) a mother. I am no longer a girl.

I am writing this in Salt Lake City, near an ancient salty lake that used to fill the entire valley, a geologic history I can see when I hike up the hills that overlook the city. Well-trod trails circle the mountains like a waterline.

Muse

After the summer students left, the school closed for a month, and my boyfriend and I lived in a small sublet apartment, with a lofted bed and a skylight. The sun came through the skylight and cast a rectangle of crisp light on the white sheets, which were always a little stiff from line drying. The rectangle of sunlight traveled across the bed through the course of the day. To get to the bathroom, we had to go out into the courtyard (stone wall, fig tree). The courtyard was private enough that we could shower with the bathroom door open, sunlight streaming in. I photographed my boyfriend at the door to the shower, a floral curtain behind him, a grape arbor overhead. He held grape leaves in front of his crotch. Another grape leaf capped his head, and he dangled a cluster of grapes over his laughing mouth like Bacchus.

We often sat on the courtyard wall and smoked cigarettes. I was not a smoker, but that wall, overlooking olive groves and a stone streets, seemed made for smoking. It Italy, smoking seemed an ancient activity that connected me to long-dead Tuscans, to winemakers and olive farmers and beautiful girls in lace and lipstick. To the art restorers that perched on scaffolding and set down their chisels for a break, dangling their legs over the piazza. And to the hunch-backed men that sipped espresso and watched soccer in the bars every afternoon. Still, I felt a little sick after every cigarette.

History: Flight Paths

My boyfriend and I did not leave Italy together. I flew first to London to visit a friend on leave from the Peace Corps. My friend was stationed in Togo, and when I met him in London he was culture shocked, overwhelmed by the city, and unhappy about his life in Togo, but after that visit he returned to his village and completed his second year of service. The next time I saw him, two or three years later, he was living in Washington, D.C., studying international law. It seemed he had found his calling, as if it were fated. As if the painting had always been in the plaster. But I was waiting tables in restaurant after restaurant, city after city, a vagabond. I left every place.

My boyfriend flew out of Rome a few days after me, and a few weeks passed before we saw each other again, back in Colorado. His flight left Rome very early in the morning, so when, the afternoon before his flight, he packed his things back in our sublet, he took the alarm clock I had left behind, an imitation of an old analog clock, the kind with twin bells on the top—its ring was startling and loud. He had always hated that clock, but he would never wake early enough to get to the airport on time without it, so

when he went to sleep that last night in a hotel room in Rome, he set the alarm. And when it woke him in the dark morning, he grabbed it and flung it—still ringing—out the open window. It clattered and broke on the street below.

ENDNOTES TO A SEIZURE

He was thinking, incidentally, that there was a moment or two in his epileptic condition almost before the fit itself (if it occurred in waking hours) when suddenly amid the sadness, spiritual darkness and depression, his brain seemed to catch fire at brief moments.... His sensation of being alive and his awareness increased tenfold at those moments which flashed by like lightning. His mind and heart were flooded by a dazzling light. All his agitation, doubts and worries seemed composed in a twinkling, culminating in a great calm, full of understanding...but these moments, these glimmerings were still but a premonition of that final second (never more than a second) with which the seizure itself began. That second was, of course, unbearable.

-Fyodor Dostoevsky, The Idiot

One night you did not come home. Late in the morning, you pushed your bike into our apartment, leaned it against the wall, sat on the bed next to me, and confessed, finally explaining to me my loneliness. *An affair,* you said. That inflated word.

I had spent the night waiting for you. On a bench in the park, across the street from our apartment, overlooking the grain elevator. I had paced the labyrinth at the Episcopal church, meditating on being alone, on being quiet, on other labyrinths I had walked—with you, without you—on my breathing, on the importance of the exhale, on the bees hovering in the lavender. I walked uphill in the dark and the wind blew. I listened to the sounds of a couple making love in the house behind me, across the street from the overlook, their rhythm traveling so far from their open window.

Two and a half months after that night, I walked with two friends in Escalante Canyon, in southern Utah, where the river made the best trail, running between red rock walls and sky. The water was shallow and not too cold, the banks patched with quicksand that sometimes gave way beneath our weight. Our boots dangled from our packs. We wore sandals, the straps eventually rubbing holes in our skin. We covered them with moleskin and duct tape, our feet growing ever soggier. The three of us slept on a slope that was too steep for sleep (*climb high, stay out of the floodplain)*. Cate, TS, and me crammed into a tent big enough for only two, all night sliding, sliding, toward the downhill end of the tent. I was the middle body, trying to stay straight, to contain myself, my arms alternately crossed over my chest or pressed to my sides. Finally, after hours of wakefulness, Cate unzipped the door, crawled outside, and wrapped herself in the rainfly—a weak barrier against ants and mosquitoes—but after that we slept a little.

The next day we walked without our packs, upriver again, but finally gave up our goal of reaching Death Hollow, which had been "just around the bend" for so many bends. We turned back. At the trailhead, we stripped out of our sweaty tee-shirts and shorts and swam in our underwear, rinsing off sweat and sunscreen and citronella, getting sand in our hair.

Quicksand is a colloid hydrogel consisting of fine granular matter (such as sand or silt), clay, and salt water.

You can spot it by the way its surface quivers and shines, but usually you don't notice until you step on it and it gives way beneath you. The liquid sand pulls you down—a murky sucking at one ankle and then the other. That weekend in the Escalante, we tested the depth of the quicksand with sticks, piercing it the way Odysseus stabbed and seared the eye of the Cyclops. Still, we were sometimes startled when the sand collapsed beneath us.

The night that you didn't come home I wasn't wearing my glasses, and the lights of the freighters on the dark bay, so far below, were blurry. I sent you another text message (*Where R U? R U coming home soon?) (I am worried. Just tell me you are okay.) (Why are you doing this?).* I left another voice mail. There seemed two possibilities—which was worse? 1) Drunk, on your bicycle, you had been hit by a car. How would I find you? Should I start calling hospitals? 2) You were with K. I turned off the light. The sun was rising. Your cat curled against my body. Still, it was hours before you came home. Days before the wide light of summer solstice—that vacant delirium.

The drive back to Salt Lake City from Escalante begins on Highway 12, winding along the top of a pale ridge, each side dropping hundreds of feet into the red and white canyons below. The road descends into Dixie National Forest, where the aspens are old growth and thick-trunked. TS was driving. Cate, carsick, had fallen asleep in the passenger seat.

We stopped for food in Torrey. The restaurant was called Chillerz—a standard fast-food/soft-serve grill, with windows for ordering outside, or a counter for ordering inside. A few families and pairs ate at formica booths. I ordered french fries, a veggie burger, and a grasshopper milkshake.

Cate was placing her order when, behind us, a man made a sound. Or rather, a sound came out of a man who was sitting at a table. The kind of sound that makes itself. A sound that forces its way out. A sound formed by the sudden, involuntary tightening of every muscle in the body, by some lurch in the brain. I thought the noise came from a person with a disability, or with cerebral palsy, maybe. That it came from a body that often made such sounds. *Don't look*.

I sat down. TS was filling her soda. But there was a second noise. The man's friend jumped up. "Are you okay?" he asked. He didn't touch the man that was making the sounds, who was wearing leather and neoprene with kneepads and flexible elbows, like a superhero—some kind of dirt bike attire. The man groaned. His limbs moved of their own accord. His head tipped back. His legs stuck out rigidly beneath the table. His neck was taut. Someone said, finally, as if reciting a dialog in a first aid course, "He's having a seizure. Call 911."

Still, I thought, this man probably often had seizures. People have seizures. He was probably epileptic.

"Get him on the ground," someone said. "Protect his head." But his body was stiff and sliding him out of the booth proved difficult. His head knocked against the back of the booth. (*How long does a seizure last?)* He was on the floor. Someone held his

arms, which were rigid and extended. Someone cradled his head. People began to surround him. (*Don't crowd him.)*

At the counter, the woman from whom we had ordered food was on the phone. Had it happened to this man before? Was he epileptic? Had he had more than one seizure in a row?

A seizure is caused by excess electrical excitement in the brain.

Seizure ***1.*** *The action or an act of seizing, or the fact of being seized; confiscation or forcible taking possession (of land or goods); a sudden and forcible taking hold.*

b. *Grasp, hold; a fastening. Obs.*

c. *A sudden attack of illness, esp. a fit of apoplexy or epilepsy. Also, a sudden visitation (of calamity).*

2. *Possession*

3. *Mech. The action of seize.*

4. The rattle and heave of an earthquake. A crack and schism. The spark that strikes the temporal lobe. The pulse and tremble. The clutching, tensing, and grasping of the muscles. The grip and run. The rift and tremor. There's no getting around the moment of surprise.

Your confession, and our breakup, came a month after your diagnosis—*severe depression*—and the prescription—*Prozac.* In that month, you had been quieter and more equanimical. You shrugged your shoulders. You no longer kicked furniture or slammed the cupboards or shouted at the cat when he chewed papers on the desk. You pushed him off. Still, you were drinking a lot.

It was the end of the semester, I thought. The near completion of your degree. And then it was graduation—you wanted to celebrate, of course. And soon you would need to find a job, though you had already been looking for months. And then you would have to say goodbye to your friends because you would move for me, to my city and the life I had begun while we were apart (*I left you in Seattle*). It was understandable, I thought. And it was temporary.

There was a Sunday when the liquor store was closed and we could not buy a bottle of gin. You kicked the door with the rubber toe of your sneaker.

But we had a trip planned for the solstice weekend. Mossy trails. Ocean. The long light of summer. And so many times we had imagined the house we would live in together. Soon. With a dishwasher (for you) and a garden (for me).

So I waited.

Later, in those few aftermath talks, you asked me why I let you drink so much. Why I hadn't said anything about it.

And later still I wondered (I wonder) if you recovered from your depression once I was gone. Was it a cause? Or a symptom? (Was I a cause?)

The man was still on the floor, but the seizure had passed. He was breathing loudly. (*When will it end?)* His friend said he had been in a motorcycle accident. That he was not epileptic. This information, these words, stumbled around all the bodies standing between the man on the floor and the woman on the phone. The words got lost, started over, started over again, butted against arms and mouths, finally made their way into the mouthpiece and through the wires to the ear at the other end.

The man woke up and made inarticulate sounds of panic. He tried to get up while his friend tried to calm him and pressed him to the ground.

VARIOUS TREMORS AND TREMBLINGS OF THE BODY

The body shakes to warm itself when it is cold. Shakes if it is used to alcohol in its blood and is without the usual infusion. Shakes, they say, if it is terribly afraid. Shakes after a rush of adrenaline (bicycle crash; public speaking). Shakes when overtaken by a demon. Shakes if the fatty cloak that wraps the nerves is degraded and degrading (as in Multiple Sclerosis or Parkinson's). Shakes if the nerves are damaged, or if it has been overwhelmed by caffeine or amphetamines. Shakes if it has been bitten by a certain spider (Australian Redback, for example). Shakes if it is lacking vitamins or sleep. Shakes in anger. Shakes in orgasm.

The medical library at the University of Utah was not what I expected. No glassy, blue-green contemporary emptiness. No high, arching city view from floor-to-ceiling windows. Only old brown carpet, vacant study carrels, and a long line to pick up a book. The requested books waited on a small cart within arm's reach of the circulation clerk—there may have been fifty of them. I spotted mine easily—Owsei Tempkin's *The Falling Sickness*. To the side of the checkout counter, a glass case of brain anatomy models caught my eye. One model was of a head with the "skull" removed. The face monochromatic, from eyelids to lips. But the brain was divided into colored sections of lavender and blue, pink, orange, green. The eyes were closed.

This is not the story I want (to write, to own, to inhabit).

Better to have more of the canyon. Those warm, red sandstone walls. The cottonwoods and the strange, tall birds. A coyote hunting by a stagnant pool. Yellow rock arches carved by millions of years of river water rushing and trickling, by groundwater seeping.

More about how the three of us got along—three women, like characters in a female *Stand By Me.* Our blisters and bandages. Maybe someone twists an ankle and we have to build a stretcher. We cut leg holes in a pack and take turns carrying her on our backs. Or we meet a strange river hermit who teaches us about living alone in the desert. And how I left my heartbreak there, in the river?

Or the story of the seizure—I'll detail the sounds he made, each twitch and shake, the rolling of his eyes, the drool. The three of us might get involved—I will hold the man's hand and he will open his eyes after the shaking and take some panicked comfort in us, the three women that are helping him, speaking to him in calm, soothing voices, our long hair hanging down around him. I want us to follow the ambulance to the next town, where there is a hospital. To view the brain scans. To befriend this man who had a motorcycle wreck. To form something beautiful out of tragedy and chaos.

Or I will tell only about the breakup—about that man I've addressed here as "you." About the relationship lurking behind all this—what happened to us? What did I lose with those square hands, those blue, long-lashed eyes, those strong legs? I will track our missteps and our selfishness, reveal our equal cruelties and scars. I will reflect on the lessons I've learned. The clarity. The letting go.

But not this rolling around of language and definition. This musing and sorting. These tumbled bits.

So I witnessed a seizure. So I wish I had held that man's hand although he was terrifying, lying on the linoleum, groaning, his French fries cooling on the table.

A grasshopper flavored shake means mint and crushed Oreo cookies. (The pun on *shake* is unavoidable, but also unintentional.) The woman at the counter, who stayed so calm when the man was on the floor seizing, the woman who called the ambulance, called out that our order was ready. She was, by now, so clearly upset that Cate—who is easily affectionate—gave her a hug across the counter. The woman had a pale green milk moustache on her upper lip. She insisted that nothing like this had ever happened in their restaurant before, as if we would have blamed them for it. As if we would have thought their business a hotbed of grand mals and heart attacks and strokes.

PROPOSAL FOR CHILDREN'S SEIZURE EDUCATION:

A puppet show.
Marionettes, of course.
The usual strings attached: head, hands, arms, knees, feet, thighs.
A double or triple cross handle, or two crosses, one for each hand.
Two puppets: Jimbo and Alfred.
Two puppeteers.
Four hands.

SHOW #1: ABSENCE (PARTIAL) SEIZURE:

Jimbo and Alfred are walking home from school. It is fall. [Drop a few leaves for a seasonal mood.] The two puppets jump in and kick at a pile of leaves.

Alfred and Jimbo: (Improvised dialogue with laughter)

Jimbo prepares for a jump, bends at the knees. He is a compressed spring, but suddenly he freezes. [Jimbo's puppeteer holds as steady as possible—no twitching.] Alfred thinks Jimbo's kidding at first, but the pause goes on too long.

Alfred: Jimbo! What's wrong! Jimbo! Jimbo! ~~Are you fucking with me?~~ What are you doing? That's not funny!

Alfred reaches out to poke Jimbo. He touches him on the arm. ~~Just before Alfred loses his shit~~ ten seconds have passed-- Jimbo resumes his jump and lands in the leaves.

Jimbo: (laughs)
Alfred: (laughs)

Alfred thinks it was all a joke. Jimbo has no recollection of the gap, has no idea anything strange has happened.

Puppeteer: What happened, kids?
Kids (in unison): Jimbo had an absence seizure!

SHOW #2: GRAND MAL/GENERALIZED SEIZURE:

Jimbo and Alfred are on the swingset. Jimbo enters the tonic phase of a seizure [Jimbo's puppeteer pulls his limbs taut.]

Jimbo: (loud groans)
Puppeteer: What should Alfred do?
Children (in unison, little voices singing): Help him lie down! Get him to a safe place!

The children are not quick enough. Jimbo has entered the clonic phase. He is shaking on the swing. Shaking and shaking, he falls to the ground, his head striking first (because heads are heavy.)

Puppeteer: Faster next time, kids. Let's give it another go.

Jimbo and Alfred are eating popsicles in the front yard. They're inventing a song, singing it in a round, when Jimbo goes tonic. [Jimbo's puppeteer yanks his strings to straighten arms, legs, head.]

Kids (without prompting): Help him lay down!

Alfred helps. Flat on his back, Jimbo begins to shake. He shakes and shakes, then is still.

Kids: Check if he's breathing!

Alfred leans close to Jimbo's face. Alfred can't hear or feel any breath. Jimbo is turning blue.

Alfred: I think his tongue is blocking his airway.
Kids: Turn him on his side!

For nine months, you and I had lived in two tiny studio apartments, in two different cities. But in the fall, we would give them both up and move, together, into some little house we had imagined over and over. (A quietly sloping street with trees. Gleaming wide-plank wood floors. A dishwasher…) But first we would spend the summer a bit crowded, in your studio, as we had spent the previous summer, after moving out of our shared apartment so I could move to Salt Lake, and return, again, to graduate school, and you could finish graduate school there, in Seattle.

The windows of your studio faced the wall of the building next door. If we looked out between the buildings, a sliver of the harbor was visible over the treetops across the street—a peek-a-boo view.

And then you stayed out all night.

In the morning you texted back. *I am fine. I will be home soon. Is the internet working?*

I pulled my clothes from the closet and piled them on the bed. I wanted to be wrong. I tried on various excuses. I gave up. I lay on the bed, waiting, watching the door.

When you pushed your bicycle into the room it seemed you were almost smiling. *Just start talking,* I said. And you did. *An affair*, you said.

Later, you told me that you had never seen me so angry. That my anger was a relief (*because it was a natural reaction? Because your own actions and reactions had ceased to feel "natural?" Because the actions and reactions of your body to another body—to a body that was not mine—were the only natural ones you had felt for some time? Whose seizure is this? Who is seizing? What is seized? I did not ask these questions. I am asking them now, but will not get answers.)*

The cats hid under the bed. You put your hand on my leg and I pushed it away. *Don't.*

You said you were not in love with her.

It took you such a long time to cry.

SOME FAMOUS EPILEPTICS *

- St. Paul (see below)
- Joan of Arc: The peeling of church bells triggered flashing lights and voices in her mind, driving her to heroism. Her seizures were *musicogenic*.
- Fyoder Dostoevsky: The aura was magical. A thrill. But he would have sacrificed the magic.
- Lewis Carroll: A seizure might be something like falling down a rabbit hole. And then you are too large for the world and you have overwhelming hands. Or you are too small and the table is looming. You have become a doll in the dark. You cannot climb out.
- Neil Young, Ian Curtis, Prince, George Frederick Handel, Hector Berlioz, Nicolo Paganini, Robert Schumann, Peter Tchaikovsky: Still, there is no certain connection between the brain that sparks the body to seize and a brain that composes music.
- Sir Isaac Newton: Like the apple, the body, out of water, is subject to gravity, and to the slipperiness of ice, and to seizure.
- Vladimir Lenin: Although he only suffered seizures at the end of his life, he died after shaking for fifty minutes.

* This list is suspiciously scant on women.

The cover of the 1979 Joy Division album, *Unknown Pleasures,* is not, as it appears, imaging from an electroencephalogram, but a picture reproduced from the *Cambridge Encyclopedia of Astronomy,* showing the first Pulsar waves ever recorded. Pulsar is what we call the waves of radiation emitted by electromagnetic neutron stars. Electromagnetism is the force that causes the interaction between electrically charged particles, the push and pull of bodies against bodies, the space between them surging and blinking.

Ian Curtis, the epileptic singer of Joy Division, who danced as if he were seizing, hung himself in his kitchen in 1980.

The *Salpêtrière* was first a gunpowder factory, and then a teaching hospital. An institution full of rats, epileptics, and the mentally ill, including, perhaps most famously, women suffering from hysteria. Does it balance that list of visionary (male) epileptics that hysteria was a women's disease? All that arching and drooling, another surrender of control over one's own body? (But "surrender" implies will, and so seems at least somewhat inaccurate.) Photos from the *Salpêtrière*, where Charcot treated hysterics with hypnotism, show women giggling, their arms floating or flung overhead, long white gowns, twisted sheets, tangled hair, contorted torsos, and pale, rolling eyes. So many tongues.

What is it to be hypnotized? To surrender one's mind and body to the control of another? In that order: mind, body. And what was hysteria, now gone or renamed, vanished into other names, other diseases? The uterus, Plato said, was a drifter, blocking passageways of the body, a troublemaking creature. The uterus was the culprit. Too light, too dry, like some autumn leaf, unweighted by fluid or fetus. They begged it to return to its proper place, to anchor itself via orgasm, first by genital stimulation (*Oh, thank you, Doctor*), and later by vibrator, by water, by fans. (But I am condensing hundreds of years of hysteria into 200 words.)

Light little womb drifting to the shoulder, lodged beneath the lung, visiting the heart. But it is all of me that wanders.

A diagram of the brain is often multicolored, so one can more easily sort the parts from each other: orange amygdala, purple temporal lobe, little pink hippocampus. The hippocampus, named for its shape (like a seahorse), is where you build your maps. Where you remember the way to the store, to your lover's house, to that tiny shop where they sell hand-cut rubber stamps. It's rumored that a London cabbie has an enlarged hippocampus, swollen with the many streets of his city.

Picturing my own city from above: so much smaller than London. My hippocampus is all sparks and buzzes thinking of that grid of streets. Follow them outward--straight lines at first, then they begin to curve in and out of each other like the whorls of an ear, ending, finally, at that those strip-mall tract-home suburbs, in cul-du-sacs. A river runs along the western edge of town, narrow on the city edge, oxbowing to the south. Cottonwoods snarl along its banks. Then the fields, in so many shades of brown or green. Further west rises the crinkled topography of mountains, which flatten onto sagebrush, then greener plains become rows of onions, and finally, the slate gray ocean (which goes on forever).

Little is known about the hippocampus—our knowledge is mostly superstition and hypothesis—but most scientists say it's also where we store our earliest memories.

Time isn't like a river, though this is a common analogy. It might be like ten rivers, running alongside each other, braiding in and out. Ten tiny streams trickling through the fall, nearly frozen during winter, rushing during spring. I know no good analogy for time.

If I watched for a day, could I see an icecap melting? How long does it take for the spoon to travel from the soup bowl to my mouth? How long to play a major scale? How long to let the final note linger? How long to learn to play a piece like a virtuoso?

How does one keep track of rhythm? How does an afternoon spent examining rocks go by so fast? While a night at home, preparing a pot roast, and eating it in silence at the kitchen table, washing the dishes under one hissing light bulb, is endless? I toss and sweat and push the blankets to the foot of the bed. The clock glows: 11:12. 11:45. 12:33. Why did I choose the digital red over analog blue hands? It is almost the darkest day of the year.

You were in the shower. I went into the bathroom to tell you I was going outside, to the park. I spoke, you turned to face me, and I saw the shape of your body blurred, abstracted by privacy glass. You were scrubbing your penis—deliberately—desperately—a performance. It was the last time I saw you naked, if it counts. Maybe you were clothed by the hazy circles of glass. You were a voice and a familiar color of skin. The shower door had been missing hardware since we moved in. All year you had lived with that door, the manager continually promising to fix it. It was always off kilter, always threatening to fall and break.

POSSIBLE TREATMENTS FOR SEIZURE
(Compiled and adapted from Owsei Temkin's *The Falling Sickness)*:

- Slurp, simultaneously, a raven's egg and blood extracted by scarification.
- Consume a frog's liver. Or horse lichen. Or camel's hair, gall and rennet of seal, feces of the crocodile, heart and genitals of the hare, sea turtle blood, boar testicles, blood of the gladiator (here it is noted: this cure "falls outside professional medicine")
- Drive an iron nail into the spot where the epileptic seized, where her head first struck the ground.
- Wrap the root of a peony in linen and wear it around the neck as an amulet. Make it a fresh one, and large. This will work best if the root is gathered under a waning moon.
- Do not handle the dead—do not even touch them (How then, does one dispose of a body? Loose ropes and dragging? Gloves? Fire?)
- Smear the patient's mouth with blood. Or bathe the patient's feet in menstrual blood.
- Kill a dog and let the patient have its bile.
- If you are the first witness of the fall, urinate into your shoe, stir the urine, and pour it into the patient's mouth.
- Wrap the victim in the skin of a goat and plunge her into the sea. Wait and see if she floats. (This tactic is for diagnosis, not treatment.)

Some seizure victims experience a physical premonition, an aura, before seizing. This may be a visual hallucination—imagined lights or blurred vision. Or it may be an acute and unexplained sense of dread or déjà vu. For others it is an olfactory hallucination, an experience of *phantosmia.* Standing in the subway, for example, a victim suddenly smells a spring meadow or rotting flesh. When an epileptic learns to recognize the aura, it serves as a warning, giving the victim time to lower herself, time to find an open patch of ground.

An aura may be the feeling that your limbs are separated from the rest of your body. Your arm might feel as if it belongs to someone else, or is floating at a slight distance from your shoulder. *Lift my teacup*, you say to your arm, and your elbow bends. Your hand grasps the cup and lifts it to your mouth, but the feeling is as if someone else is tipping the hot liquid against your lips, and also that you are tipping the hot liquid against someone else's lips. Tipper/Tippee. Nurse/Patient.

In *The Odyssey,* people are often slackening at both knees and heart. And to die a violent death is to be "unstrung at the knees." *"I wish Helen's seed could all have perished, pitched away, for she has unstrung the knees of so many men…"* Literally, this makes sense: sinew, muscle, skin, cartilage, all shriveling and disintegrating, the bones detaching from each other, dry and bare. But more than this, the phrase conjures a body like a puppet's, held together by satin thread or waxed floss or leather laces, a neat knot at the nape of the neck. One snip and the limbs detach and scatter, the bones tumbling downhill: kneecap, femur, metatarsal. Knock, knock.

Like a seizure, a shiver is an involuntary tremor, a ripple through the body, but unlike a seizure, it starts on the outside, on the surface of the body. The wind snags your arm hairs. Or her whisper strikes your eardrum. Or you walk, dripping, from the lake in the early morning, the fog rising around you (shining ghost). You squint at the brightness in the east. The air is so cold. And so your body shakes, quickly, warming itself. Your skin blooms a garden of goosebumps.

Orgasm, then, is a tremor somewhere between shiver and seizure. The source, again, begins externally, but unlike a shiver, which seems a purely physical reaction, orgasm kicks off some pretty complex brain activity. The body feels-the brain wants-the body feels. And then, at the moment of climax, we stop thinking. The body moves.

Or seizure and orgasm are opposite tremors: a seizure being an electrical spark in the brain followed by the seizing of the body, while orgasm, like a shiver, begins as friction between body surfaces. Touch is registered in the brain, circles back again to the skin, desire and friction making a continuous circuit. Or does orgasm begin (so quietly) in the brain—with the sight of the desired other? With the smell of her? I do not know where orgasm begins.

This conflation of seizure and orgasm, this epilepsy of heartbreak.

At my younger sister's wedding, a month before the night you didn't come home, you wore the boots I bought for you—brown Italian leather—and a wool vest. You had replaced the buttons yourself that morning, proud of your sewing skills. You parked the car for my dad so my parents and I wouldn't have to walk from the lot. You held my hand during the ceremony, but disappeared during the family photo session. My sister called you over. In the photos, you stand behind me, but it is visually unclear if you are attached to me or to my older sister. Then you went to get me a drink and never returned. You missed the toast and the first dance and the cutting of the cake. You danced with my sister's beautiful friend. The next morning I woke up crying and couldn't stop, and you brought me coffee so I wouldn't have to show my puffy eyes in the kitchen, but you never asked why I was crying. No matter—I would not have been able to answer. I didn't know. You said *I need an adventure.*

Seizure victims and migraine sufferers sometimes experience "scintillating scotoma" as the aura that prefaces the seizure or headache. A black spot hovers in their vision, or lights flicker. These might expand into shimmering white arcs or zigzagging prisms. A visual hallucination.

Scintillating scotoma was first described by the physician Hubert Airy sometime during the late 19th century. The hovering name of a man who used words to anchor an ephemeral visual phenomena.

Scintillate: (v.) to sparkle or shine. "She has a scintillating personality."

Scotoma: (n.) Greek for "darkness." A blind spot. Partial degeneration of vision. In psychology, this is metaphorical, referring to an individual's inability to perceive personality traits in herself that are obvious to others.

Scintillating Scotoma: Such a sparking, sparkling darkness.

The shimmering bruise that hangs over the scene at the park where a couple walks slowly, holding hands. It is dusk, and you are still at work and, walking home with groceries, I am startled to recognize that I am lonely. It is a chandelier shadow. A scrim. A warning, but I don't recognize it. (*The seizure is coming.)* (*Shimmer. Spark.)*

The taste on your lips once that I dismissed as impossible. The way you wrapped your fingers around her skinny bicep to measure its thinness—you touched her so casually, the way one touches only a body with which one is intimate, and I looked away. The

dampness my fingers sought on the towels that afternoon when I came home from a weekend away—looking for proof you had slept there and woke there, proof that you had slept in our bed. The blouse I left on my pillow was unmoved, the button still loosely attached, dangling from a thread. The proof I sought that you had showered there and brushed your teeth and made coffee and fed the cats, who followed me around the apartment, meowing as if they were starving, though it was the middle of the day, nowhere near their mealtime. The towels were dry. (*I am acting crazy.)*

The blot in my vision. It was not in the sky, though I saw it there, like rising smoke. Not a lash or gnat stuck to my cornea. Not a mote or speck of dust. Not a splinter, beam, or plank. A cloud. An ink pool, floating and untouchable.

THE CONVERSION OF ST. PAUL

Saul of Tarsus hated Christians. He was on his way from Jerusalem to Damascus, where he planned to collect a few of them for trial and persecution.

As he neared Damascus on his journey, suddenly a light from heaven flashed around him. He fell to the ground and heard a voice say to him, "Saul, Saul, why do you persecute me?"

"Who are you, Lord?" Saul asked.

"I am Jesus, whom you are persecuting," he replied. "Now get up and go into the city, and you will be told what you must do."

The men traveling with Saul stood there speechless; they heard the sound but did not see anyone. Saul got up from the ground, but when he opened his eyes he could see nothing. So they led him by the hand into Damascus. For three days he was blind, and did not eat or drink anything.

– Acts 9:3-9, New International Version of the Bible

In Damascus, in a house on The Street Called Straight, Saul's sight was restored by the touch of a man named Ananias, and Saul of Tarsus became St. Paul.

A flash of light. A fall. A voice. Darkness followed by residual blindness. In 1987, D. Landsborough published an article in *The Journal of Neurology, Neurosurgery, and Psychology* proposing that Saul's collapse may have been a seizure.

The God Helmet was constructed by Michael Persinger, a neuroscientist in Ontario. Bright yellow with black racing stripes from forehead to cervical vertebrae, studded with magnets and veined with wires that twist over the top, tangle under a strip of leather, polished beetle shell with blank snaps and a missing chinstrap, padding around the ears—a snowmobile helmet.

Sit. Relax. Close your eyes. We are attaching the electrodes. If you want to leave, speak into the microphone here, on your lapel. Okay.

An electrical pulse, stimulation of your temporal lobe, and you're gone, drifting, rising out of your body. A flickering just out of sight. God is hovering in your peripheral vision—if you could just turn your head a bit faster, a bit further, you can't quite see Him—there, there, there. He's behind you now. A floating light. A gauzy shirt. A twinge. A scent of chopped shallots. Of cardamom. The small, bare breasts of the girl you loved at fourteen. Smoke rising into the winter sky. Yellow streetlight. Salt crystals growing in a jar. A constellation of freckles on her collarbone. The convex gleam of the eyeball. Limbs in the deep water, reaching. Sinking through a sunweb, seaweed waving. And there: your pale foot.

Many wearers report disappointment in their experience of the God Helmet. Persinger points out that one feels safe while sitting in a lab with electrodes attached to one's head, but what if you were to wake, alone, in the middle of the night, and feel yourself drifting, unmoored over the bed? What if your car stalled on a frozen road in the darkness of a Vermont January, and that light flickered, those crystals grew, you saw your body—like a sandbag, so small—sitting in the car while you floated upwards with the smoke? What if you collapsed on a desert road, midday,

and in the darkness that overtook your vision, there was only God flickering in the corner of your brain?

So God is an electromagnetic pulse, a spark in the temporal lobe, a hovering presence at the edge of vision. Or God built our brains to almost see him, always glimmering, always just out of sight?

I could not stay there, in your apartment, sleep beside you, pretend it hadn't happened, although I admit I wanted to. It was 3 PM. You curled on your side in bed, not looking at me. What had you expected? You said you didn't think, hadn't thought. It wasn't planned, you said. You agreed to drive me to Tacoma, to my best friend's house.

It was rush hour, a Tuesday, but I barely noticed. At the stoplight at the intersection of Denny and Dexter, where the neon pink Elephant Car Wash sign blinked and spun above us (old friend), we talked about passion. About something my mother said once about how, or why, you and I had not married. We heard an accusation. That we had not married because we lacked heat. That we lacked some essential desperation. How did she put it, exactly? You said you thought about that comment *every day*. And for a moment I thought that you were right. That she was right. That our nine years together had been useless and cold. For that moment, I forgot.

But maybe what she meant was not that we lacked passion, but that we were too concerned about timing, about circumstance, too concerned about getting things just right.

On the sidewalk, a man was walking an iguana on a leash. I pointed at him and the man bent down and picked the creature up and put it on his shoulder, and we both laughed.

For that moment, I forgot the way the wild blackberries once stained our fingertips. Their thorns caught our sleeves, scratched our ankles, drew beaded lines of blood. We lived, then, in our first house together, or rather, the first house for which we had both signed the lease, where there were no sidewalks, only gravel shoulders, and the cars parked at haphazard angles. The city felt so northern to us. The new trees. The new angle of light. How we kept saying to each other, ecstatically, *We live in Alaska!* even though it was Washington.

Once, on an island in Lake Michigan, you called me down to the shoreline, but I wouldn't come. (*Why not?)* A little exasperated, you came to where I stood, near the trees, and knelt on the stones, and asked me to marry you. But I didn't believe you. As if marriage were something you—anyone—would make a joke of, a prank on bended knee. I thought you were being impulsive. That it was a fleeting thought. That you didn't mean it. I was too surprised.

And then we didn't talk about it. The asking. The refusal. The confusion. I was about to begin graduate school for the first time, and I had this idea that it might change me, and that you were afraid of my changing, that your impulse was driven by fear. I did not say this. (*Would it have mattered?)*

And in my ears, Rilke: *poems amount to so little when you write them too early in your life*. *You ought to wait and gather sense and sweetness for a whole lifetime, and a long one if possible, and then, at the very end, you might perhaps be able to write ten good lines.* But I did not say this. And then, I did not change much. And those lines sound different to me now, and mean differently. There is nothing in them about being alone.

That day, we rode our bicycles away from the beach, back to the ferry, in silence, you pulling ahead. I did not pedal harder.

And then, for years, you thought I did not believe in marriage, which means, at least maybe, that you understood that I loved you, or that you tried to believe that I loved you, despite what I had said (*no)* and despite what I didn't say *(I am terrified*). We were young, but not too young to marry.

I didn't want to make mistakes. I made mistakes. I am making mistakes. I will make mistakes.

Our hallway was full of bicycles and dustbunnies. There was the dirt road in Idaho, the fumbling with seatbelts. The yelp of coyotes at Mono Lake. And how we got free tickets to the rodeo. In Guatemala, I didn't like *Tres Leches* cake—so rummy and wet. They way your unwashed hair smelled like bread. It was hard to walk on a narrow sidewalk with you, beside your shoulders, just wide enough for me read them as selfish. We were startled at the sudden green of spring sagebrush. In bed we listened to tugboats, to foghorns, to the grain elevator where the ships docked. Your back was marked by three freckles, spots on lucky dice. We carried a desk up the street for two blocks and its edge cut into my fingers. The snowplows pushed the snow into the median. It so often rained on Sundays. You complained about your long eyelashes, how they got in the way. The bottleglass house. The redeye flight. The map room in the library. A dizzy walk across the Brooklyn Bridge. The fans in the Ethiopian restaurant spun so slowly. We cycled past a *stavkirke* and goats grazing on a turf roof. We took an all-day walk in the rain—dripping stone lions, marbles and keys and bits of old cell phones embedded in the concrete. We got lost. Woolen horse blankets on the bed. Your dead mother's St. Francis birdbath tangled in rosehips on that acre by the Rio Grande. Gray cottonwoods shook their leaves over the clothesline. While we were away, the cats turned on the faucet and flooded the house. The roads were always slick with rotten leaves. My bike tire slipped on the train tracks and I got sick with adrenaline and you put your hand on my knee and waited. Your dad raised and butchered a steer and buried the scraps in the yard. He showed me the spot. How you loved my knees. How you loved the backs of my knees. The long way you always hugged your sister. We looked into the volcano and saw only steam. At the black sand beach you stayed so close to shore. You are not a strong swimmer. The rats on the step that we called Nimn. The ladder to the attic rooms. Calla lilies in the yard. The drunk with bare, red knees pissing in the doorway. The shower with excellent pressure. The haircut on the back step. We drank a lot of whisky. We left our shoes in a heap by the door. We watched each other.

AS A BITCH PACES ROUND HER TENDER WHELPS,

SO GROWLS [MY] HEART[1]

Querido,

Our possible love is like the harvest season in a small western city, where people grow produce in their yards. And in this city, I don't have a yard. I live in a second floor apartment, with only a box of flowers on the sill. Sometimes I steal from other people's gardens.

(The gleaning tally: 3 peaches, one cluster of very sweet grapes, one Italian plum that tasted like omg-the-most-perfect-sun-sugar-evah (must go back to that tree today!), two strawberries, one cherry tomato, and a little bag full of goodies from Esther's garden--these given freely.)

And so it is with our possible love: covert and delicious, but never mine. It never really belongs to me.

Yours in innocent thievery,

s.

[1] The Odyssey of Homer: XX.14

Tenderfoot,

I would get a tattoo if tattoos had the power of metaphor. The way a metaphor results in metamorphosis: the moment it is spoken, the girl that laughs like a hyena becomes a hyena, running across the Sahara, loping and hysterical. I would ask an artist to drive those tiny inkstains into my skin. A seahorse on each ankle would be my wing-fins, my *talaria*, my swift golden sandals. I would be an aquatic Mercury—triumphant messenger—but swimming like a pufferfish in the Super Mario Brothers water levels. Adrift in carnival music, blowing bubbles.

As of yet un-inked,

s.

Fluid Dram,

(I ask you: be mine. But while you are thinking about it, listen.)

The Halloween costume brainstorm is upon me. It is my favorite part of the holiday. Oh!—the tumult of ideas, the tempest, the options for barroom banter. I'd go out drinking every night for this: the possible metamorphoses! I favor a kinetic costume, engineered or interactive, although last year my detonating device failed and I was forced to be a permanently detonated mushroom cloud for lack of engineering skill. (I built a cloud of Mylar balloons, turned inside out. They were meant to inflate on demand, at the prompting of a CO2 cartridge and a bike pump, but the balloons were not sealed well enough and the cartridges were too small.)

The first round of ideas includes a collage of the Odyssey (rosy fingers, a sheep skin on my back, a fast black ship jutting from my heart, a golden tapestry hanging from a loom, finger puppets…). Or a forest fire (tiny green-leafed trees like a pelt. The pull of some lever and they'll lie down, silk flames will flutter, and the blackened trees will stand. Something like a pop-up book. Like a dog with hackles.). Or Pinocchio with a growable nose would be fun—a nose that ratchets on a crank. I may have convinced a friend she should be not a cloud, but a storm cloud with a rain option (ribbons and glitter?) and a sun option, and a bolt of lightning that ejects from her cloud. But she and I also considered going as a pot roast (her) and baked Alaska (me. "Flammable," of course), which quickly led to one of us being an entire meal on a plate (add asparagus and roasted potatoes), and that led to the TV dinner with glued-on kernels of corn. What will you be?

In keeping with my own predictable patterns, Sugarplum, let me compare myself to a mushroom cloud. Or rather, to a person dressed as a mushroom cloud. I was my own metaphor: a precious mess of cheap glitter that sticks to the booze soaked floor. A performance of something deadly, but, truly, a naked being—pink-skinned me. Freckled and wrinkled and aging, but wearing frayed silver and cotton and taped-together Mylar. Me, pretending to be the embodiment of glamorous, whimsical, invisible, scientifically-miraculous, deadly poison.

Yours 'til my cells run amok,

s.

Mi Pobre Hormiguita,

When we ate the raspberries in meditation group I, too, thought of sex, but unlike Adam, who was sitting next to me, his stomach growling, I did not mention it during the debriefing (debriefing is not a word we would use in meditation group, it being far too martial for such a context. I think our leader calls it "The checking in." Or does he avoid naming it? He only asks about our experience with the raspberry.) So Adam said he thought of sex, the only one bold enough to say so.

So sex, when it is going well, is a mindful act. The way we focus on each sensation as it happens. The way we notice even the tiniest details—*especially* those tiny details. The scar above your lip. The difference between the texture of the skin on your stomach and that on the inside of your elbow. The way, when we first made love, before we got around to the sex part, you narrated everything as it happened: *I am going to kiss the small of your back. Now, I am going to kiss you right here, on the back of your knee. This spot, here, between your fingers, is a very special part of your body.* How your narration was like a guided meditation, though at the time I'd never done one.

Six raspberries in a white napkin on my lap. *Look at the raspberry,* said the meditation leader. *Study the shape of it. Observe the varying colors.* The raspberry had small hairs and a hollow center. One of the six raspberries on my white napkin (now stained with raspberry juice) was smushed. Each berry was in a different stage of ripeness. *Pick up one berry between your fingers…Feel the shape of it…Let the raspberry rest in your palm…Consider its weight…Smell the raspberry.* (The raspberry, under my nose, smelled something like paint.) *Put the raspberry in your mouth and feel it on your tongue…Eat the raspberry.* I pushed the little fruit around, tasting it with my different tastebuds, thinking that each zone of my tongue could taste a different flavor—sweetness at the tip, sour on the sides. (I learned later that this isn't true. Our tongues are more of a wildflower garden, the different flavor receptors scattered almost evenly. The average human tongue has 2000-8000 tastebuds--a tremendous range. I hope, of course, that I have a number in the upper range—say 6500. 8000 may be too many, leaving one overwhelmed and with an aversion to flavors too intense. A childish supertaster.)

The seeds of a raspberry are bitter relief. I swallowed the raspberry. I felt it slide down my esophagus. So small and macerated, it traveled further into my body.

Mindfully,

s.

Cowlicked One,

Here's the plan: I will divide the canvas into calendar segments. 30 days in five rows of 6. 30 boxes in a grid. And each day I will chew my food, mash it to a paste between my teeth, my tongue, the roof of my mouth. I will not swallow that first bite but let it fall—nay—spit it onto the canvas. I will press it, with my tongue to its corresponding box. A good solid lick.

Box one is stained with raspberry. Box two with kale. Box three with olives—oily. Box four: chickpeas with cilantro and onion and lime. The pastes will harden. Some of them may grow a fur of mold. We will see what happens. I will label them in a Twombly script with the type of food and the date. In pencil.

My last love was like this. Dare I say all love is so? Like food, the first bite so delicious, and we devour it, and soon we no longer taste the flavors, our palate becoming so accustomed. And even the most perfect balance of flavors rots if left on the counter, or stored in the back of the fridge. Day after day, the nutrients go rancid. But then they become texture. They become color.

Sincerely,

The Macerator

Barefoot One,

In the summer, the romance of the scholarly life falls away, stripped like finish from wood, and what remains is the bare and splintered and aged plank that might snag my finger, or the bottom of my sock, or might be used like a pumice to smooth the callous on the side of my pinky toe. Once, the scholarly life glimmered like sunshine through leaves in the fall, the leaves not yet turned yellow, but now I sit at my desk writing or reading, and I am not happy in the way that I thought this life of scholarship would make me happy. It no longer glimmers like that. I do not, any longer, feel connected (like a potato, like one aspen shoot to its grove) to all the scholars that came before me. All those who also lived "a life of the mind," at their typewriters, surrounded by stacks of books and papers filled with scribbled thoughts. They drank coffee all night. But in summer I see that it is just me, with my acne and my thinning hair and age-spotted hands, and the unswept floor and the garbage stinking in the kitchen because last night I ate chicken and threw the Styrofoam package and the plastic wrap in the trash can, and I haven't yet bothered to take out the trash. Just me, alone here and growing older-- no matter, no matter--and the library books are overdue.

Yours when the snow falls,

s.

Summer Fruit,

Sundrunk, like the bee drowsy from feeding on the pear that fell to the grass, so am I in your presence. But September is blurring into October and the pear is mashed into the grass, all pulpy and fermenting, and its golden-brown skin is withering in honey-mush, half in shadow, under the tree whose branches rise like a candelabra. To the leaves cling spiderwebs, only visible when the light hits them. Tender strands that stitch the pear branches to the sky.

In bloom and in rot,

s.

My Dear Festering Splinter.

The thing is, every metaphor falls apart when you look at it closely enough. The laughing girl is much *less* like a hyena than she is *like* a hyena. Beginning with her laugh, the whole reason for the comparison: it is more controlled and lower and less barking than that of those crazed dogs. She wears high heels every day. She has no desire to set foot on the African plain. No analogy ever holds for long. The two things being always two things, with different names, different qualities.

You and I? We are not like skin cells, growing next to each other on one body in a possibly malignant mole. We do not pass fluids between our porous cell walls, osmotically. We do not nestle and exchange, nor divide spontaneously and systematically, cloning ourselves.

We are not two homes in a rowhouse, sharing a wall, allowing the scent of curry to pass between us. If you are torn down, and our shared wall is suddenly exposed (my outer wall was your inner wall. The books are still on the shelf, along with a sugar bowl and an alarm clock. The place where the stairs once climbed is now a stencil of stairs). No, we are not like that. We are not a rowhouse. We are not a gap-toothed city. We are not a mouth, not teeth, nor, if you choose to leave me, are you a missing tooth.

Yours truly,

A Single Family Home

LIGHT IS A WELL-SHOT ARROW

The Naming of the Moons

Saturn has 62 moons, but in 1847, when John Herschel suggested that Saturn's moons be named after the nine Titans and Titanesses, Saturn's mythical siblings, he only knew about eight of them. He hadn't seen the entire kingdom of circling spheres, including small shepherd moons that travel with flocks of ice and dust, nestled in gaps of Saturn's rings. He didn't know about the slew of miniscule moonlets. When more than nine moons were discovered, the namers resorted to other Roman gods and mythological figures. Then they named the irregular moons after Inuit gods and Gallic gods, and finally, after the Norse Ice Giants.

A Smudge of Ice

In 1835, Herschel traveled by ship to South Africa in order to study the southern skies. There, he noted, among other things, the return of Halley's Comet. The rhythm of the stars is so much slower than the rhythm of waves, but the same beats wash over us that washed over ancient Babylonians, who marked the appearance of the comet in cuneiform on clay tablets, and over John Hershel as he peered through a telescope somewhere in South Africa in 1835.

Few people see Halley's Comet twice in their lifetime. If a person is a curious, skygazing youngster, born near the comet's presence, and her vision holds out as she ages, she just might see it twice. The comet was last visible in 1986, but it was under the worst viewing conditions recorded during the past 2000 years, the sun positioned between comet and earth.

I was ten years old in 1986. It was 4 am, and like ducklings, my sisters and I followed our dad through crusty snow to a beach on the shore of Lake Michigan. Our toes grew numb inside our boots while our dad studied the place in the sky where we were supposed to see the comet—he was a subscriber to a monthly sky map—but he could not find it. A week later we saw it from our backyard, a smudge in the binoculars like a thumbprint, dusty and pale.

In 2061, when the comet returns, I will be 85 years old (if I am lucky—or is this luck? It depends, I suppose, on whether 85 means forgetfulness, infantilization, drool and pain). But say it's luck, and my 85-year-old self leans into the eyepiece of telescope and sees Halley's icy trail as it passes us once again. Earth-bound, I will marvel, far more than I did at age 10, that a cold, inanimate rock can glow, can move so swiftly through the galaxy, while I, with my 98 degree blood and the electricity sparking in the mysterious coils of my brain, can move at only 2 miles per hour.

The Flowering Division of the Vegetable Kingdom

Herschel coined the word "photographie," although it had been coined 4 years earlier by French-Brazilian Hercules Florence. Herschel also used light sensitive vegetable juices to make "phytotypes," and discovered how to make photographic images

permanent by using hyposulphite of soda, what we called “hypo” or “fixer” all those days and nights in college when I stood in the red light of a darkroom, singing along with some minor key pop song, watching chemicals slosh in a tray.

Herschel was friends with the scientist John Children, after whom a python and a mineral are named—the Children Python (A python for kids!) and Childrenite. I imagine Childrenite as a rock that grows a crop of grubby toddlers, but really it’s a vitreous, inanimate crystal that looks like dirty quartz, brownish and growing at splintered angles, like the fingernails of Nosferatu.

Herschel was also friends with Children’s daughter, Anna Children Atkins, who made famous the cyanotype process, another of Herschel’s inventions. The cyanotype is a photogram, a contact sun print made on Prussian Blue paper. The object one places on the paper leaves behind a pale silhouette, a negative of its shape.

In college, I once used Prussian Blue to print a series of letters to my sister, who was younger than me, but also in college. The letters were handwritten, in cursive script, and included small portraits of my sister. In one, I asked her to play dress-up with a box of diaphanous fabrics that she draped over her shoulders and her head. She held them out against the light that shone through the window. It was winter, and the trees behind her were bare. In another, I asked her to open her mouth wide, to pretend she was shouting, and I focused the gap between her front teeth, the dark cave of her mouth. I bound the printed letters in twine and tucked them into a handmade envelope.

Daughter of a Scientist

In the early 19th century, women were not encouraged to learn or study science. While men gathered in London to share their findings at the Royal Society, the women walked across the fields, made tea, raised children, ran households. But Anna Atkins' mother died after giving birth to her. Anna was her father's only child. She drew seashells for him. She illustrated his translation of *Genera of Shells* with pencil drawings, quiet coils, like ears.

When I look at her drawings, I want to hold one of those shells in the flat palm of my hand, make it a talisman. I would whisper into its whorls and seams. I would stop biting my nails. I would slip it into my pocket for when I needed it.

Atkins is known for publishing the first book of photographs, but beyond this she barely exists in history. She dedicated her book to her friends of the botanical bent, as a visual aid for their studies. And cyanotypes, like Atkins herself, are silhouettes, far less detailed than drawings, despite their perfectly replicated scale, despite their documentary nature. They leave a great deal to the imagination.

The Topography of His Chin

In 1867, Julia Margaret Cameron made a portrait of John Herschel. Like all her photographs, its tone is velvety sepia. Hershel's white hair sticks out of his cap like frost on straw. His eyes catch light, looking beyond the frame, beyond the visible world. Shadows gather in soft folds beneath his eyes. The sharpest focus is on his white-stubbled chin.

Of her photography habit, Cameron said, "I longed to arrest all the beauty that came before me and at length the longing has been satisfied."

The statement seems strikingly out-of-date: nowadays its rare to consider one's longings satisfied. A feast only stretches the stomach. A word, however perfectly chosen, only shivers and slips away, splinters into a network of associations. *Scratch my back,* I ask my love. I bend my own arm behind me to point at the spot, and he scratches, compliantly. But always it's *A little to the left. A little higher.*

On the Action of the Rays

Once upon a time, during a partial solar eclipse, Aristotle looked at the ground and saw the eclipse projected upon it. The moon was passing between earth and sun, making a crescent-shaped fireball that no one could look at directly. The sun shined through an aperture of leaves and drew itself with the moon as an upside down crescent, and Aristotle was puzzled by this phenomenon, the first recorded instance of a camera obscura.

Why is it that an eclipse of the sun, if one looks at it through a sieve or through leaves, such as a plane-tree or other broadleaved tree, or if one joins the fingers of one hand over the fingers of the other, the rays are crescent-shaped where they reach the earth?

Light moves like a well-shot arrow.

I once built a camera obscura in an abandoned house at the edge of town. Most of the windows were broken, and the shredded curtains blew in and out. The floor was scattered with guano and birdshit and broken glass and rabbit pellets and small green

plants that twisted up between floorboards. There was a frying pan in the sink, but the water didn't run. A leather boot in the toilet. Every time I entered the house I held my breath for a while, and then forgot. I kicked nails and gravel across the floor. I studied the decaying scraps of a quilt.

In a small room, I taped black paper over the window—it was remarkably intact—leaving a pinhole through which the light entered. The sun came through the branches of a dry cottonwood outside and cast an upside down image on the wall, a network of tangles that moved with the wind. I taped white paper to the back wall to trace the tree, to make a perfect drawing like I have heard Vermeer may have done. But the branches moved, and the focus was soft. My drawing came out strange, as if I had drawn a spiderweb with my eyes closed. As if I had drawn enlarged varicose veins. Even tipped upright it did not look like tree branches against the sky. My eye was inaccurate, unable to fill the gaps, unable to see what was really there.

But in the breathless hush of the house with the tree in it, upside down and joined with the peeling wallpaper and the rusted pipes, I didn't care. I had seen the tree, the decayed quilt, the frying pan, the shadows of a life.

A Fugitive Color Will Disappear

In an alchemist's lab in Berlin, 1704, a painter named Diesbach mixed saltpeter and cream of tartar, but the saltpeter was oily with oxblood or animal bits. The paint—meant to be crimson—came out purple, an accident of tainted salts, gathered from who-knows-where. Maybe an ox stumbled at the mines and tore its hoof. The salt was scraped and gathered and sold anyway.

The intended red paint was called “lake,” called “fugitive.” It would have been impermanent, quick to fade in sunlight. Red lake was made with the acids of the cochineal insect, a South American bug that feeds on cacti. The male cochineal has wings, but the female simply digs her mouthparts into the cactus. She goes nowhere, but her body was crushed to make paintings of Jesus, for the scarlet robes of angels and saints. And such is our lust for color. Cochineal is in our food dyes—frosting, cheddar cheese, jam—and with it women paint their lips. They lick the stray smudges from their teeth.

But Diesbach made Prussian Blue.

In the Young State, In Fruit

A cyanotype looks like a movie of your memory projected on the wall on a winter afternoon, late sunlight washing the corners. Anna Atkins had a collection of British algae and one by one she pressed them beneath glass, against paper coated with Ammonium Iron (III) Citrate and Potassium Ferricyanide. She set the glass and paper in the sun and the sun shined through the glass and through the leaves of the algae, through its tentacles and roots, through the clusters of its blossoms. Atkins rinsed the pages in water, and each sheet of paper bore the marks of sun and water around the shape of the algae, pale at the center of the deep blue page.

Atkins’ cyanotypes are of ocean gardens, of underwater dreams, silent but for the bubbles of one’s breath breaking the surface above. Later, Atkins made images of intricate ferns and the petals of poppies, their stems tangled, their tightly closed buds like sperm with whipping tails.

The Romantic Sensibility

If the roots of the plant are the human unconscious, and the flowers are our yearning for the divine, reaching and reaching and reaching, then what is the earth? We people become its appendages, little figures with dirty feet, and it becomes the collective unconscious, our source and place of union. But we reach away, straining for something—for sky—even as we draw its nutrients into our bodies.

The Wonders of Industry

In 1851, a new building sprang from the London ground, all glass and steel and enclosed trees. Everyone gathered there: Anna Atkins and Charlotte Bronte and Charles Dickens and Matthew Brady and Charles Darwin and George Eliot—they all went to see the Great Exhibition. The glass building was packed. Shoulder to shoulder they strolled beneath the glass, in a surprising hush, curious and thrilled. They marveled at caskets filled with pearls, at velvet-covered tables strewn with gold, at the inner-workings of trains. They leaned close to inspect daguerreotypes, surgical instruments, and microscopes. Everything was being made, being built, being cut, cast, polished, and assembled. And through the glass roof, there was the sky. They watched clouds drifting past. And time went on hurtling.

Call Us Not Weeds

Anna Atkins and Anne Dixon were girls together, almost sisters. This much Atkins wrote down. Later, when they were married women, they must have gathered their skirts and waded into tide pools side by side. Must have plunged their hands deep, picked

sand from the tendrils of the plants they found, gently dug them out at the roots and laid them flat on tissue.

It was Anne Dixon that came when Anna's father died. He was nearly a father to her, too, having raised her alongside his own daughter, his Anna, so Anna's husband asked Anne to come. This, too, is written down. But how would it have gone?

"I don't know what to do with her," Anna's husband might have said. "She spends all day buried in her father's papers. She not longer takes walks. Her pillow is always damp. Please."

So Anne came.

It is not written, but *my* Anna Atkins had a study, not a "drawing room." Not a parlor, but her own room full of shelves and specimens and jars and pencils and bottles full of chemicals. And it is the door to this study that Anne Dixon would have flung open when she arrived to save Anna from her grief.

"Darling girl," she might have said, her hands on her hips, though she and Anna were no longer girls. Anna's eyes were red and puffy and her hair thinning and tangled. She hadn't even pinned it up. Her face looked like a cabbage, folded. "Come with me now. You need some air."

The day was cool and hazy. The two women examined the crisp remains of summer's flowers. Anne picked a Yellow Rattle and shook it, the seeds scattering like rice after a wedding.

Movement was the thing they could not draw, could not press between glass and paper, could not capture with sunlight. And Anne, as I imagine her, was fleet. Anne was a woman always turning away, always walking out into the field, always bending to look at

a specimen instead of holding your gaze. She crouched to examine the veins of a leaf, the structure of a seedpod. She stood and whirled off like a dandelion seed.

But what is known of Anne Dixon? What is written? She was a cousin of Jane Austen, but they were not close. She helped Anna with her second book, the cyanotypes of ferns and flowers. The script that labels the images is thought to be hers. But Anne Dixon is a ghost, a trace walking at the edge of the frame.

This much is written: she died and was buried in a churchyard beside her husband. She had no children.

Orchid Mimics Wasp, Wasp Mimics Orchid

Plants depend on us. We are seduced by sugar cane, by tomatoes and apple trees. We are manipulated into thinking that we need them. But then, we do need them, their starches and their fibers and—most of all—their sugars. To eat only meat, only milk, only cheeses or creams—the thought makes me thirsty. Plants taunt us with their berries, their sweetness or bitterness, their bright flowers and clustered florets. They seduce us into harvesting them, into sowing their seeds. They lure bees to pluck their pollen, to carry them to the next plant, to the next blossom, to do the work they cannot do for themselves.

When my plants die—and this year so many of them have died: the snakeplants, the small pine tree that always dropped its needles, a tangled air plant, a jade that had grown from a cutting—I feel terribly guilty. I keep them around, shriveled and dry, for weeks. And when, in the vegetable bin, a red onion sprouts spring green shoots, I prop it

up on a wooden cutting board. I photograph it each week, and the shoots grow over a foot tall, devouring the purple bulb. The house begins to smell of onion. It is a beautiful plant.

If, someday, I have a child, I hope she does not inherit my brittle fingernails, my sun-sensitive skin, or my anxiety. I hope her hair is like that of the man who scratches my back. We will not often comb it. And if I look through a telescope in 2065, I might focus on the planet where she lives, this daughter with tangled hair. I will focus on the planet where she cultivates edible mosses. Or maybe, instead, she will be the one that tilts the eyepiece toward me, both of us earthbound. And she will heat water for tea, then zip her jacket and go out for a walk through the night.

But maybe I will not have a child.

Juices of the Flower or Leaves of the Plant

When Anna opened the pages of her herbarium, she saw that the specimens had bled through the pages, staining the opposite page with their mirror image, although in some cases the color of the imprint differed starkly from the color of the plant. It is surprising the way the colors of plant juices change as they dry, but then, so does human blood, often darkening nearly to black as it hardens. And the dried color and texture depends largely upon the surface to which it has been applied.

In the herbarium the colors were mostly greens and yellows, some of which dried to brown or olive, or faded out almost entirely. The pages never dried flat, but were bulky with the smashed, brittle plants pressed between them. But when Anna lost her child, the blood that traced the edge of the washbasin was deep red, only slightly more violet than it was when it left her body.

A child is like a plant, an algae flower in a salty sea. My Anna wanted one: a child. But she never again wanted to see the color of her blood change as it dried on her skin or on the edge of the basin or on the wooden planks of the floor from which it was impossible to wipe, the planks so porous and cracked that they wore the blood like varnish in the grain.

Spontaneous Generation

Once upon a time, it was thought that tapeworms were born of the bodies of their hosts and that dead flesh generated maggots. Jan Baptist van Helmont (1580–1644) recorded a recipe for mice:

1 damp towel
+ wheat
+ time (21 days)
+ sunshine
+ scorpions
+ basil .
=1 batch of mice

Why do I imagine that Anna Atkins lost a child? Perhaps I assume that all British women in the 19th-century wanted children, that all of them were defined by motherhood? Perhaps the plants are manipulating me again, swaying me with their fecundity and fertility, shaping, even, this imagined Anna. The language of reproduction is agricultural: all seeds and husbandry, cultivation and fruit. While 19th century British women were discouraged from pursuing scientific knowledge, botany was safe territory. Because a woman's body is the land from which the fruit sprouts? Because women are "of the earth?" It's not outrageous to imagine that Atkins wished for a child, but why do I

imagine that she lost one this way? To miscarriage? There are many ways to lose a child, and it is even more likely to never contain one, to never conceive.

But my imagination, rife with tragic narrative, walks the shore with the wind and the sunshine, and ruins another perfectly good essay. My imagination jumps into tide pools and pulls up orange and purple starfish. My imagination rolls down the dunes and coats itself in sugary sand.

Six months ago, in April, my own Anne Dixon, the friend that would wade with me in tide pools, birthed a stillborn baby girl, the baby's heart gone silent at eight months. And today I wait for this friend to call from her distant city, to tell me about her visit to the surgical obstetrician who will study the ultrasound, who will determine the quality of the polyp they have found within her, who will interpret the numbers that measure her hormones, the quality of her blood, the possibility for a child.

I wait. I turn the pages of a book of cyanotypes. I check on the oyster mushrooms I am growing in a pail in the kitchen.

II. STORIES

REAL SILK

House to house, at every door a stranger. The hedges and trees were much neater than in his neighborhood. The trimmed lawns and flagstones. The orange trees and sprawling live oaks. The bungalows with river-rock pillars and wide, shady porches. The bathrooms with tiny towels and seashell soaps and lavender water. And the ladies—there were some beautiful ones.

Like the one with black hair piled on her head—a mess, but she was wearing lipstick anyway. She had a smudge of something on her nose. It looked like engine oil. Maybe she was cleaning the oven. Ruben was suddenly shy, an expensive luxury for a salesman. But then there were the women with acne, and those with bad breath, with Cream of Wheat dribbled and crusted on their blouses. But all of them had legs, wore stockings, had a pocketbook and a pen.

Ruben had thick brown hair and a new pair of glasses—a splurge paid for with tips from the bread delivery job he'd quit in April when William offered him the Real Silk route. Ruben was responsible for selling stockings to every woman east of Orange Grove, between Colorado Street and California Avenue. He lived with his mother on the other side of the Suicide Bridge, near the Linda Vista Hills. On bad days he thought of the people who had fallen or thrown themselves from the edge into the arroyo—the way they must have looked as they plummeted. Did they kick or flip? Flail their arms? Seem

to float? But usually he just looked at the curve of the bridge high along the bank, the way the sun set the concrete aglow.

We wouldn't open our doors to him. Not nowadays. What, with robbers roving the cul-du-sacs? The rapists in police uniform? With even the kid selling candy for The Boys and Girls

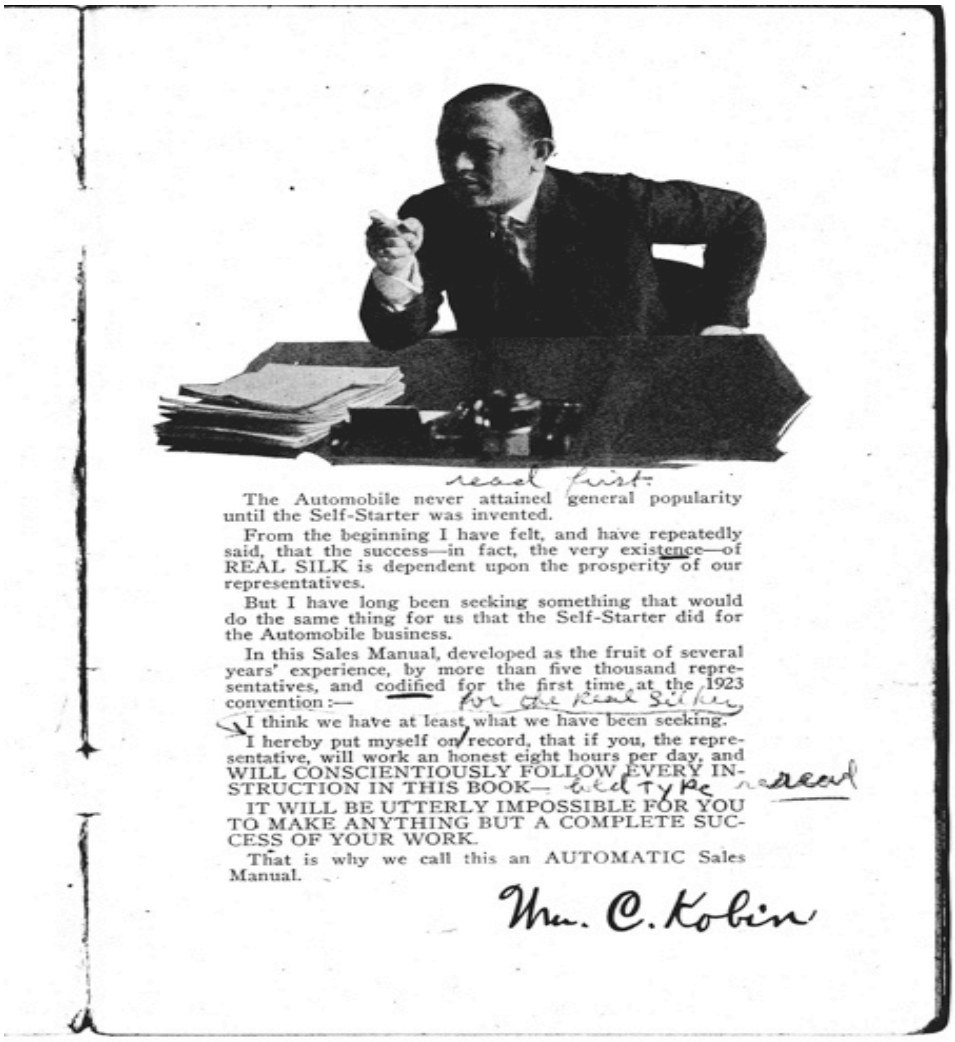
Club pocketing your dollar? Put your eye to the peephole. Drag the barking schnauzer to the bathroom.

But it was hard for Ruben, too. A stranger at the door, puffed up like a rooster. Like an ex-con: suited and combed, shoes gleaming. Ruben stood on the latch side, hidden until the door was mostly open. Two and a quarter feet from the threshold, intimate, but not intimidating. He flashed the button on his lapel. An official emissary from Real Silk Incorporated. A Real Silker. A door-to-door.

- *Smile. Step forward slightly.*
- *Say, "How do you do" (not Howdy-do).*
- *Avoid talking like a parrot. Speak conversationally, as one human being to another.*
- *If she tries to close the door, the situation will require backbone.*
- *Transferring the Advance Letter to the left hand, raise the right hand with the forefinger extended, and say dominatingly, but still SMILING—"Just a minute, madam."*
- *Properly done, this will halt her retreat nine times out of ten.*
- *Say, "Don't you want to know how to prevent runs in silk hosiery?"*

There were so many of them—salesmen—with polished buckles and cases stuffed with stockings or chicken breasts. Or hocking vacuum cleaners, leather shoes for the mister, gilt-edged family bibles, miracle solvents, electric irons.

Women were more often home. Maybe they were bored. Maybe they were seething. Pinning the diaper on the clothesline. Pinning the diaper on the baby. Sometimes they came to the door with their hair in their eyes. Take this one, holding the door with her hip, pushing a baby into his arms. Babies liked to blow little bubbles, to paint his glasses with soggy zwieback. Babies had sharp fingernails. They were all arms and legs and fat to Ruben. They smelled a little sour, or they smelled like talcum, the smell of his mother's bathroom. The clean ones he didn't mind. Their mothers chewing gum, hitching their skirts, bending down to buckle a shoe.



read first

The Automobile never attained general popularity until the Self-Starter was invented.

From the beginning I have felt, and have repeatedly said, that the success—in fact, the very existence—of REAL SILK is dependent upon the prosperity of our representatives.

But I have long been seeking something that would do the same thing for us that the Self-Starter did for the Automobile business.

In this Sales Manual, developed as the fruit of several years' experience, by more than five thousand representatives, and codified for the first time at the 1923 convention :— for the Real Silker

I think we have at least what we have been seeking.

I hereby put myself on record, that if you, the representative, will work an honest eight hours per day, and WILL CONSCIENTIOUSLY FOLLOW EVERY INSTRUCTION IN THIS BOOK— bold type on record

IT WILL BE UTTERLY IMPOSSIBLE FOR YOU TO MAKE ANYTHING BUT A COMPLETE SUCCESS OF YOUR WORK.

That is why we call this an AUTOMATIC Sales Manual.

Mrs. C. Kobin

You may have failed in several other lines of work before you started with Real Silk, and yet you may still make a success of your life, if

1. *You find out and admit the cause of your previous failures.*
2. *You are willing to pay the price of success*.

If you have not yet attained a really solid and fixed position in life, lay the blame squarely at your own door. Don't try to shift it to some one else.

Ruben had failed as a student, a paperboy, a sandwich maker, and a bread deliveryman. As a child, he had failed to clean his plate at every meal. He had failed to win a single footrace. Failed to regularly do his chores. Failed to save his father from death. Failed to comfort his mother at her loss. Failed to take his mother on holiday to Hawaii, on holiday to anywhere. Failed to fight for his country, to find a wife, to have a child, or even a dog. His mother was rapidly losing her mind and he was failing to do anything to preserve it. He had failed to learn to sing, to cultivate a voice of butter and silver. Failed to make close friendships. Failed to write a play. Also, he was overweight and had never been to the opera.

His mother used to call him "Rube," but never at temple and not in front of company. She stopped the practice entirely around the time she started getting careless with her makeup. She never called him Rube anymore. She rarely called him anything.

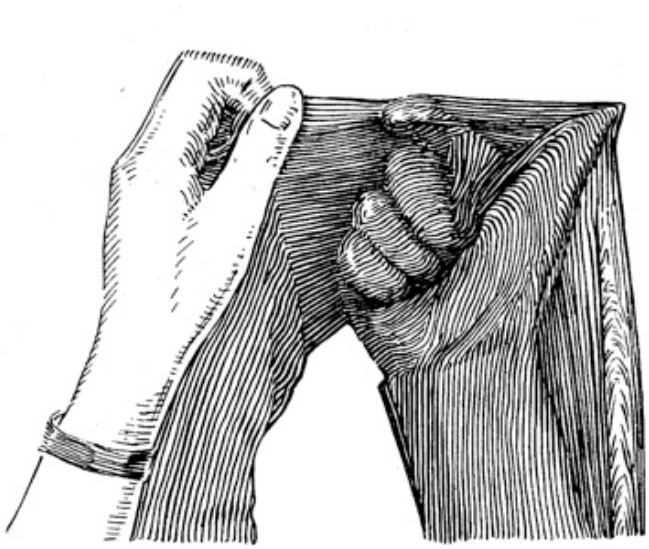
"Ma," he said, holding out a handkerchief. "Lipstick on your teeth."

She had always been meticulous—no stray hairs or clumped lashes—but still, he hadn't recognized the lipstick smears, or the single shadowed eyelid, as a symptom. She was only forty-nine. Too young for dementia, but the lipstick was only a portent, an augur of the iceberg's calving, its frigid bob and drift.

Ruben watched her sitting at the table, a cup of tea growing cold, a closed book beside it. Her steely hair needed a trim and frizzed around her face. She looked exhausted, the skin beneath her eyes thick and soft and slumping. Maybe that was it.

"You tired, Ma?" he asked. She didn't look up.

Then there was the way she often forgot words, had taken to gesturing midsentence, her cupped hand raised and circling, as if the word might fall into it like a hailstone or a freshly laid egg.



The Story of Silk
Every great industry has its romance. Whether it be that great section in western Pennsylvania, where steel mills darken skies and tell of prosperity, or whether it is the depth of a blackened mine—whether it be the spiring smoke stack of the camera industry, the burning fires of thousands of coke ovens, or the countless acres of wind-blown grain—all these have their own individual romance, a story of human interest as their source, a spot where human beings dreamed and their dreams came true.

The silkworm crawls along a branch—tiny mandible gnashing, body plumping—gorging itself on mulberry leaves. The worm binds herself tight, spinning a corset from her own fibrous spit. She sleeps. She wakes. The acids of her body etch through her cocoon. She burrows her way out, unfurls her papery wings. So many leaves to produce this flitting, this batting at the lantern. The eggs she lays are the size of a pin's head and stuck to the underside of a leaf.

Ruben dreams the silkworm farm: row upon row of mulberry trees, sunshapes shifting on the brown grass. Workers wander the orchard, stripping the leaves from each branch, filling baskets hanging from their arms. The hands float as if sewing, pulling thread through sky, leaf, and basket. The bare branches look like flayed fingerbones. The sun parches a new section of grass.

On the toilet, Ruben reads about the Silk Road from a new pamphlet William had given him. How it stretched its veins and vessels across Asia to Italy where families slept in the stable, giving up the house so pupae could sleep on the pantry shelves, in the chifferobe, in the bed or in the bathroom, all along the mantle. How women snuggled cocoons between their breasts, where the temperature was just right. The Silk Road bled onto ships and the silkworms sailed the ocean, hulls and holds stuffed with cocoons, which would soon be baked, or bathed in acid to kill the pupae before the moth destroyed the silk. And then the fibers were unwound, stretched and washed, dryed, dyed, and spooled, woven into ties, blouses, dresses, stockings.

But the real romance, Ruben thinks, is between his customer's leg and the stocking he hopes to sell her, which makes him a matchmaker. Ringing and knocking, smiling and proffering. A parrot alights in a nearby tree, chattering so loudly Ruben can't

be heard, so the woman invites him in and leads him to the sitting room, offers him a cold glass of lemonade. Her skin, he tells her, can kiss the luxury of Ancient China. He drapes a sample over her wrist.

PHOTOGRAPH No. 4
Position of fingers as hand is put into foot of stocking

> *If you are not by nature enthusiastic, cultivate an appearance of enthusiasm by imitating it, just as an actor would. If your imitation is any good it will react upon yourself, and you will soon be naturally enthusiastic. If you are not already enthusiastic, and cannot acquire enthusiasm, you will never become a salesman or a REAL SILKER, and the sooner you know it, the better.*

Ruben's sample case was covered with brown tweed and had nickel-plated spring-closure hasps. Nudge the buttons and—snap!—the lid opened, revealing an array of stocking samples pinned to a card. Navy, cordovan, black, white, nude, three different shades of gray; 8 droopy silk toes aligned. They looked deflated at first, but if he set them on the table and angled them toward the light, the fibers gleamed, which seemed to revive them. Closing the case offered its own satisfaction, and was almost as snappy, allowing for an abrupt exit if the sale had gone poorly, and made him feel brusque and powerful if the sale had gone well, and then he always made sure to throw in the free package of Ivory Soap Flakes.

The best thing in his case, and one of his best sales tools, was the silkworm cocoon that he used to tell the customer how silk was produced. It looked a bit like a Madeleine or a marshmallow, plump and soft and bready. It was creamy colored, with a few frizzy strands forming a pale cloud around it. He had cut the cocoon in half with a razor blade, and once a customer had studied it whole, he opened it, lifting the top half like the lid of a ring box, holding it on one flat palm, displaying the pupa, shining like a nut, dead and brittle on its nest of raw silk. The pupa was smooth, its brown body segmented like a pinecone, but its stunted wings were evident, tightly wrapped and shellacked, never to soften or unfurl.

He never let the women touch the pupa, but there he was, sitting alone in the back of the streetcar. He ran his finger over its segments and thought of the cartilage between his knees, the cracking of chicken bones. He apologized to the pupa under his breath but wasn't sure what he was apologizing for—that the worm had been sacrificed for silk stockings, cut short? That its silk had not even made it into stockings but was toted around in his case everywhere he went? That he revealed its fat, dead body to at least fifteen women a day, never letting it rest in peace? Or simply that he had touched it with his clumsy, slightly greasy finger?

He came home to the sound of the teakettle wailing. It was belching like a smoke stack, his mother nowhere to be found. That there was still water in the kettle seemed a good sign, but he found her in the yard, scuffling through the packed dirt, lightly touching the tops of the yuccas as if counting them. Duck, duck, duck. The full lungs. The waiting for goose. She wore one shoe and a winter coat (it was June).

She didn't answer when he called to her, so he walked across the yard, through the motes and haze. He touched her shoulder, and found it unfamiliar, smaller than expected. It was as if he were approaching a stranger in the street, perhaps to tell her she had dropped something valuable—a train ticket or a watch or a pocketbook—and when she turned to face him he saw that he was a stranger to her, too. They were actors, meeting on a sidewalk on a stage. Her eyes looked past him. She emitted a sound he couldn't classify—both scream and moan—a sound that picked up where the kettle had left off, its tone lingering in his ears when her lungs finally emptied. He pictured them—her lungs—out of air, front and back tissues clinging. She gasped and the lungs refilled. She looked at him.

"Did you get the bread?" she asked.

People have been losing it since they first staggered upright and dragged their fingertips through the mud, but perhaps it wasn't as evident back then, being easily interpreted as an evolutionary lapse into primitivism, the brain still shrugging its residual grunts, still feeding on raw meat and grubs plucked from the undersides of decaying logs.

Ventricles enlarging, opening, emptying.

Hollowing, hallowing. The demented moves towards sainthood, tortured and visionary. Invisible sparks from neurons to dendrites are electrical messages, projected onto the internal movie screen, the mind's eye. But in the demented brain, the nerves are snarled, a frayed and tangled mess. The messengers wander onto dead ends, into live wires, fizzling but leading nowhere. The messages get lost.

The stove is hot, says the neuron. Or: *This is your baby, all grown up. Don't you know him? Your own child? Your Rube?*

In the last presidential election, most Californians had voted for Calvin Coolidge, the incumbent, who won by a landslide. The average Californian could expect fifty-four years of life. A drive from New York took about thirteen days. The city of Pasadena was growing more slowly than during the last census period, but it was still growing by fifty-four percent. The Jewish temple was four years old. The trenches, the poison, the bayonets and tanks of the Great War were six years in the past. The ashes, the bones, the pooling ink of WWII was fifteen years in the future. Four years had passed since Henry Ford published the first article in his series of four: "The International Jew: The World's Problem." Einstein's paper on special relativity had existed for nineteen years. Einstein himself was forty-five, half gray and bright-eyed, two years away from writing in a letter: "I, at any rate, am convinced that [God] does not throw dice."

If you could run alongside a beam of light, it would appear as a point in space, like the slowly spinning blade of a fan tracked by your retina, clearly defined, as if standing still.

It is difficult to imagine a world before the Holocaust, but light had been speeding for so long, shadows had been scarring the film for ages.

PHOTOGRAPH NO. 5
Note the rounded heel

Genuine silk is an animal fiber, sensitive to heat, cold, friction and strain, and while it is the strongest and finest of all animal fibers, it is sensitive to improper handling. That is the key-note of your service education.

An animal fiber. Like skin or fur. Like muscles or tendons or eyeballs. Ruben decided against offering those parallels. "Like hair" would do. Think how carefully you must handle your hair. You wouldn't dye it with just anything. You wouldn't wash it with lye or bleach. You certainly wouldn't brush it with the potato scrubber.

Silk hosiery should be washed as quickly as possible after each wearing; never thrown in with the general wash. The stockings have absorbed, while worn, the waste matter (perspiration) which is constantly thrown off by the pores. The ***liquid*** *acid in perspiration may evaporate, but if the hosiery is laid away soiled, part of the acid remains to attack the silk.*

When Mrs. Helen Barney took off her shoe, and Ruben leaned toward her with the sample stocking, he smelled the clammy stink of her foot. She had been wearing shoes without socks. Her toenails were brittle and unpainted. He smelled her briny sweat, her laundry detergent, and something else—something like bread baking. Like her pillowcase would smell when she'd just risen and the cotton still held her heat. He

couldn't help it—he took a deep breath and held it in lungs, swished it like wine across his tongue.

> *There is a difference between courage and nerve. Courage is the quality that enables you to look the seventh prospect in the face and smile after you have been turned down by the six preceding prospects.*

He rang and knocked at the same time. A bucktoothed blonde in a green dress opened the door. He had dropped off the advance letter the day before, so she knew he was coming.

"How do you do?" he said.

"I've got plenty of stockings, sir. " She smiled and her teeth seemed even more prominent.

"Real Silk are not just any stockings, ma'am. May I show you some samples? I'm sure you'll be impressed."

She stopped smiling.

"I never buy from canvassers." She closed the door swiftly, no time for dominating smiles, no time for "madame."

He rang and knocked at the same time. No one came. He went around back. Knocked again. No one. He knocked again. He counted to one hundred. He wedged an advance letter in the door.

He rang and knocked at the same time. He stood on the imaginary X, feet shoulder width apart, one hand on the button on his lapel, other hand ready for shaking. She cracked the door and couldn't see him, cracked it further.

"How do you do?" he said.

"You're the third peddler today," she said. "And it isn't even lunch time." She closed the door.

He rang and knocked. Knocked and rang. Rang and knocked.

"I only wear lisle. Silk is just too fragile."

"No, no, I'm just not interested."

"I'm too busy today. Maybe come back another time."

"My husband doesn't allow me to talk with canvassers when he's out."

"I don't need any stockings, but can I have the soap flakes anyway?"

Pausing under a live oak, he wiped his forehead with the back of his hand. It was almost midday and even the birds were quiet. He shrugged his shoulders a few times to loosen them up. He practiced his smile—with teeth, without teeth.

He climbed the steps to a heavy looking bungalow. A reel mower sat in the yard but the grass was yellow. His sample case pulled at his shoulder. He let it fall on the doorstep beside him. It rocked on its hasps. He rang and knocked.

She said, "Good morning."

"You remember me?" he said. "Mr. Gilmore of Real Silk. I left you a letter yesterday, which entitles you to our service, without cost or obligation. I have also been instructed to leave you a package of Ivory Soap Flakes. Have you read the letter?"

"Oh, my," she said, smoothing her hair over her ears. "Yes, yes."

He leaned down to pick up his case and felt his belly spilling over his waistband, pressing against the leather belt, the buttons and zips and buckles and fibers. Sweat rolled

around from the back of his neck down the front of his shirt. He lifted the case. "I'll just step in, with your permission."

She stepped aside, holding the door wide so he could enter. He imagined the heat of his body bouncing off her cool skin, a heated frying pan meeting a half-frozen pork chop. The door clicked shut. He was supposed to lead her into the sitting room, get her seated and comfortable, get her chatting. But all the doors from the foyer to the rest of the house were closed. Where had she come from? It was like he had walked into in a closet. He put his case down.

> *Practice saying—"Mrs. Jones, here is one of the most* ***interesting*** *things you ever saw in your life," and when you have learned to say it with the right enthusiasm in your tones, and the right expression of complete sincerity in your face, you will never have any more trouble in showing the book.*

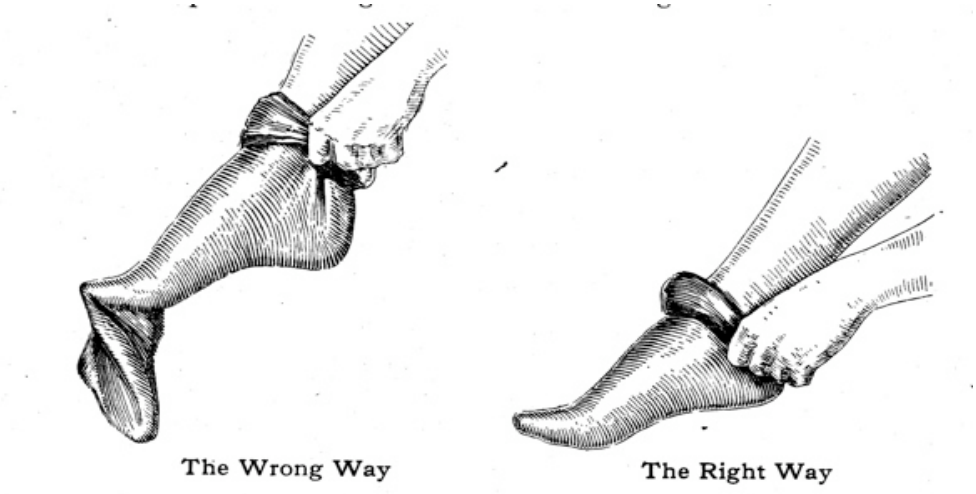
A tiny woman wearing an embroidered apron and house shoes. A cap of hair that she continually smoothed, alternating hands. A voice that seemed to come from the bottom of a well.

"It's too dark out here," he said. "Might we go inside where you'll be more comfortable?" He put his hand on the nearest knob. She didn't stop him, so he turned it, and pushed the door open, once again lifting his case, he stepped into the living room. A rocking chair and a sofa faced off across the floorboards. Bare walls. No table. No lamp. No rug. It was even darker than it had been in the foyer.

"We keep the curtains closed so it doesn't get too hot." She fanned herself with her hand. "I just hate this heat."

He pushed the rocking chair closer to the sofa and tipped it forward for her. “Will you be so kind as to be seated? I want you to be comfortable, and what’s more, when you sit down it’s easy for me to show you this remarkable picture of our laboratory.” She sat. Ruben listened to his own voice, echoing and stiff.

He opened the case. She watched him, her entire head tracking his movements like a cat watching a bird through a window. He exhaled. She would buy no more than a single pair of stockings—lisle, probably, which was practical, durable, and cheap—or she might order socks for her husband. He tried not to rush the presentation.



*The price of success is **effort.** Mental as well as physical. Thinking as well as doing. Driving yourself steadily forward to earn your ten dollars today—and then putting in some evening hours on the problem of how to earn eleven dollars tomorrow.*

Ruben had not broken $8 in three weeks. He had considered tagging along with William again, asking for more training, but that would mean no sales at all for that week. Ruben waited for William across from The Grand Opera House, a three story brick and mortar building with arched stone windows. The building had thirty-six years to Ruben's thirty, but now housed the drugstore, where he and William ate their Wednesday lunches.

Ruben loved the opera house. Years ago it had been topped with onion domes, gilded and bronzed, and the stage was complete with a heavy curtain dropping between acts, but the opera goers had shivered in their cushioned seats, their bones rattling, their lips bluing in the balcony—it was unheated. By the time Ruben discovered opera, no voice had sung on that stage for years. It had been a stove and heating showroom, barely a hotel, and now the drugstore.

Standing across the street, at the post office, Ruben imagines the opera-goers hitching up their silks and feathers, gliding to their seats for a production of Madame Butterfly. Their need for stockings was tremendous. Their need for silk slippers. The tiny glasses they unfolded in the balcony, their eyelashes spidering against the lenses.

"Ahoy there, pal-ee!" William loped up the sidewalk, practically shouting. He was hatless, his blond hair shining. His tie hung loosely. "Don't know about you, but I'm sure ready for some grub."

> *A thing must be pictured in the mind before it is realized, so if you would appeal to a customer's imagination you must first get a clear image in your own mind of the picture you intend to paint for her. You may not have imagination naturally, but it can be cultivated.*

Ruben sat at the kitchen table, while, on the phonograph, Caruso sang the part of Pinkerton in Madame Butterfly. It was his favorite opera—the quiet passion, the privacy of Butterfly's death. And that Pinkerton was such an obvious villain, a clear-cut cad, so undeserving of Butterfly's devotion. But despite the character he played, Caruso's voice was absolutely heroic. What woman could resist him? If only he, Ruben, could sing like that! From the other room, an occasional snore cut through the music. His mother slept, her belly full of mashed potatoes, Ruben's specialty.

Indeed, it was difficult to imagine being a woman. He pictured Helen Barney, with her messy hair and the smudge on her nose. She had ordered a half dozen silk and a single pair of lisle—a decent customer. She kept her hands soft and smooth—no ragged callus or hangnail would ever snag her stockings. Ruben held his hands out and inspected them, seeing Helen's hairless knuckles, her nails gleaming with red enamel.

He saw her husband sitting at the table in a cloud of smoke, puffing a fat cigar. He was reading the paper, drinking a whisky and water. He kissed her. The flavor of whisky and tobacco filled her mouth. The blue smoke softened the lines of the furniture and the wrinkles on his face, but made her eyes burn. Her husband ignored her for the paper, occasionally lifting his glass for a refill, seeing her only later, in the bedroom, when it was time to do his husbandly duties.

What would make Helen, this soft-handed wife of a cigar-smoking whisky-swiller, buy stockings? Would they recapture her husband's attention? Would they stave off the scaly dryness of age?

He tried to imagine—closed his eyes even—but on the phonograph Cio-Cio San had reached the moment of her suicide and he was distracted. Helen became Cio-Cio San

and her need for silk stockings, her husband and his cloud of smoke all drifted off. All she wanted was honorable death. She stood with her dagger poised, her blindfolded child on the floor at her feet.

Ruben pushed his chair back from the table and stood. He sang along with the opera, his voice cracking. He raised his own imaginary dagger to his chest. *Oh, for love!* The dagger fell. He plunged it, and collapsed onto the table, spilling a glass of water. A fork clattered onto the floor.

PHOTOGRAPH No. 7
How to show the fashion marks

No matter how good a salesman you are, you are going to lose a certain percentage of orders if you do not keep yourself neat and clean. Your clothes do not have to be expensive, and they ought to be quiet and conservative, but they must be kept freshly pressed and brushed. Linen should be spotless, and shoes shined. Be careful of your teeth and finger-nails.

He stood with one hand extended, the advance letter slightly creased between his thumb and forefinger. The other hand held his hat, tipped slightly toward her, shielding his heart. The woman wouldn't take the letter.

"My letter of introduction," he said again. He shook the letter a little.

She narrowed her eyes and slowly, deliberately, looked him up and down. He straightened up, retipped his hat.

"What did you say your name was again?" she asked.

"Gilmore, ma'am. Ruben Gilmore."

She nodded. "Gilmore. Yes. Well, I have no interest in your goods, Mr. Gilmore."

"I'm a service man, madam, sent by Real Silk to help you get better results from your hosiery. There's no obligation to buy anything." With his hat, he touched the button on his lapel to show her he was bona fide.

"I am just not interested in anything you're selling." She stepped back into the house and slammed the door.

Ruben stared at the anchor-shaped knocker. The advance letter rattled in his outstretched hand.

He turned, and walked down the drive, where a Ford was parked. He slapped the car's taillight as he passed. Slapped it hard. Then he spit on the tire. He paused to watch the spit roll down the gleaming hubcap. He spit again.

> *A stocking or sock should never be pulled on by grasping it at the top and forcing the foot down through the narrow ankle. The stocking should be rolled up in the hand clear down to the heel—slipped over the toes and then unrolled evenly and*

smoothly until first the foot and then the entire stocking is fitted. That's the right way, and the easiest, too.

William had hired Ruben, and trained him, but they knew each other from the deli, where William had been a regular customer (pastrami on rye, extra mustard, no pickle). William was a top Real Silker—fair and blond and friendly. He had square, white teeth.

"Take a look at this," William said, beckoning Ruben to lean in. They were sitting side by side at the counter. William usually spent lunch swiveling his stool, an inch this way, two inches back, but he was perfectly still now, holding something in his lap.

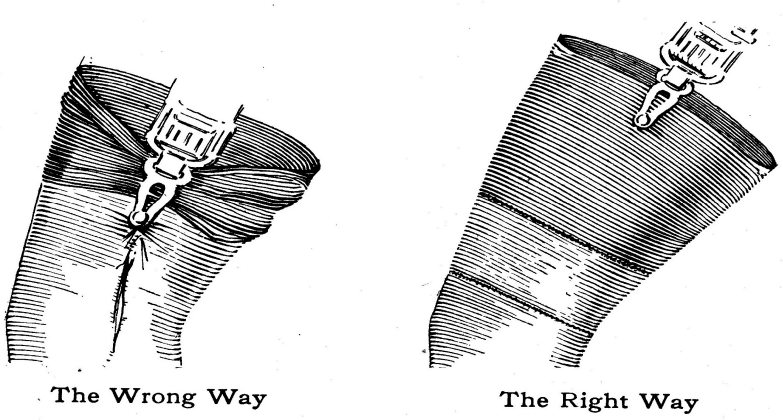
Ruben set his sandwich on the plate. Mouth full of egg salad, he leaned close to William. Under the counter William held a small tin box. The label was orange and showed the silhouette of an Arab on a horse, wrapped in billowing cloth, the words "Three Sheik" in blue lettering over his head.

"Condoms," William whispered. "The ladies *love* this brand. Something about the horseman. They go nuts." He cracked the tin so Ruben could see the rubber coins resting in the box.

"I don't use them," Ruben whispered, feeling the heat rise to his cheeks. He licked a bit of celery from the corner of his mouth. William raised an eyebrow, winked, and tucked the tin back into his pocket.

"You can get them here," he said. "Right up front. On the way out."

Ruben took a huge bite of his sandwich and chewed slowly.



Ruben's mother had almost been beautiful, but there was something off about her chin. It was too pointy, too small. Plus, she was shy. She rarely laughed. She always looked away. There had been a time when her body filled her clothes, weighting and pushing at the fabric, but lately her bathrobe seemed empty and electric, rippling with static. Once, when he was helping her to bed, she had flung the robe off her shoulders with no warning, letting it fall to the floor and she stood there in only a sagging pair of underpants. He rushed from the sight of her small breasts, hitting the light switch in time to see the blue sparks still leaping and crackling in the robe around her ankles.

His father, too, had been hunched and shriveled. While other fathers strode jauntily along the sidewalks, off to their jobs in fedoras and suspenders, Ruben's dad tripped over his shoelaces, spilled his tea, scattered toast crumbs down his shirt, wiped his nose with the back of his hand. He was sick by the time Ruben was twelve, beset by a constant cough, all kinds of rattling and running. His voice all but disappeared, as if it had slipped down his throat and gotten lost among the terrible organs. Ruben brought him things while he sat in his chair. The newspaper. His slippers. His dad patted him on the head as if he were a dog.

Be Persistent. The surest success-rule in closing is to make a woman say NO three times before you give up. Women rarely mean NO the first time they say it.

Helen opened the door. She was smiling. Her face was clean, scrubbed looking and pale. Her hair was combed and parted, pulled back tightly, but the second button on her dress was missing, and she was barefoot.

"Well Mr. Gilmore," she said.

"Just checking up," he said. "I happened to be on your street. Has your order arrived?"

"Come in, come in." She held the door for him and stepped to the side.

He went in and set down his case. She put out her hand for his hat, which she hung on a rack with three other hats. She saw him looking.

"My husband insists on different shades and different colored feathers," she said. She took a gray one down and showed him the feather—dappled black and white with a blue tip.

"Very nice," said Ruben.

"He could keep the haberdasher in business all by himself." She put the hat back. "Would you like some tea? Or something cool? I think we have cream soda."

A baby began to cry.

"I'll be right back," she said. "Go on in and sit down, Mr. Gilmore."

He went into the sitting room where he had sold her the stockings and settled on the sofa. He leaned back and flung his arm over the back of the cushions, imagining

Helen next to him. She came in holding the baby and sat down on the sofa, not quite under his arm. Blushing, he folded his hands in his lap and sat up straight.

"This is Millie," she said, shifting the baby around so he could see.

"Hello, kid." He winked at the baby, who gurgled and rammed her head into her mother's neck. "So, have your stockings arrived?"

"Not yet. But it's only been a few days," she said. The baby whimpered a few times and then wailed. "Didn't you say it would take ten?" She bounced the baby up and down.

"Yes. They're coming all the way from Indiana, you know."

The baby screamed.

"I should go," he said, but he didn't move.

"I have to feed her," Helen said. "Do you mind?"

He gave a nod.

She unbuttoned the front of her dress. What was she doing? Only poor people breastfed their babies. He looked away, but couldn't help it—he looked back.

"I really should get going," he said again. The baby had latched onto Helen's breast. It was a mollusk. He couldn't move.

"Are you married, Mr. Gilmore?" she asked. She had pulled the edge of her dress so it covered everything the baby's face did not, but the smooth skin above her breast, above the baby, was bare. Her skin was so pale. She did not look strong enough to feed another living creature. He could see the blue of her veins, the faint shadows where her ribs met her sternum. There was a mole, just off center, round and black, a single spot on a die, a terrible roll.

"No," he stammered. "I live with my mother."

"Oh," she said. "I hope my little Millie here will take care of me like that some day. If I need her to." Millie detached herself and Ruben saw Helen's nipple, wet and pink. The baby smacked her lips and gasped, then reattached, gulping furiously. That the creature would grow up, become a person—a woman—it was impossible. Millie flailed and grabbed at her mother. Ruben could not look away.

Then he was touching Helen's knee, laying his hand on it. His hand was a monster. He stared at it. His fingernails were immaculate. Helen didn't move. His fingers were spread, crawling over the edge of her thigh. She sighed and the baby clucked. She sighed again, then straightened up, shifting away from him. He pulled his hand back.

"Mr. Gilmore," she said. "I'm really sorry. You should go."

No matter toothpaste, astringents, or soaps. No matter vitamins and unguents, blueberries or green tea. The body is a traitor. It stretches and dapples. Rattles and oozes and gasps and heaves. Neurons dive into wormholes. The brain is so easily tricked: a magnetic field is goodness, is god, is hovering, is a ghost, is an epileptic seizure. The left hand loses track. The right hand takes another cookie, and another. The pancreas defects. The white blood cells divide and divide.

> *I trust that you now have a clear conception of the raw product of which our stockings are made. The story of silk is interesting. The kiddies will like to hear it. Grownups, too, enjoy the tale. There is nothing but pleasure in telling the story of Real Silk.*

He stood on the sidewalk, blinking in the three o'clock sun. The row of houses sat sealed against him, holding their breath, full of hats and plates and socks. Across the street, he saw another salesman—brown fedora, tweed case—stepping out of a house, loudly thanking an unseen customer. The man walked down the driveway, nodded to Ruben, walked on to the next house.

They were an army. A squadron of salesmen in suits and shiny shoes, with balding heads and swinging sample cases. He pictured them as from above, tracking their footprints up and down the street, cris-crossing each other's paths, marching over each other's shadows. Up and down the walkways. A tipped hat, a nod, knocking on the same doors, one after another. Bells rung. Brass rings lifted and tapped. Doors opening and closing. Silk stockings. Radiators. Life insurance. Light bulbs.

From his pocket he took a stack of advance letters and let them slide from his hand into Helen's yard. It was a windless day. He kicked at them, then mashed them with his foot. Parrots yammered in the trees.

> *"Ivory Flakes" are absolutely pure—contain no alkali or harsh ingredients—and make such an abundance of suds that harmful rubbing is unnecessary. Proved ideal for washing silk hosiery, by laboratory tests, we recommend its use exclusively.*

The house was too hot.

"Ma!" he called, closing the door. He set his case down and took off his shoes, setting the side by side on the mat. He could hear her somewhere in the house—creaking

floorboards, shuffling feet. “Ma!” he said again. She wasn’t in the kitchen. He heard water running somewhere.

He found her in the laundry room, in front of the sink, tap gushing. Steam and suds spilled onto the floor, piling around her ankles, mingling with a dozen torn and crumpled Ivory packets.

“Ma!” He crossed the room and shut the water off, feeling his socks grow instantly wet. “What are you doing?”

She had a scrub brush in her hand—a small one, with fine white bristles, the kind meant for cleaning mushrooms or tomatoes or lace. Over her other hand she wore a navy stocking, stretched up to her elbow. Fingers spread, hand rigid, she was scrubbing hard. The silk was a mess of snags. Her skin was raw and scalded. When he turned the water off she looked at him, slowly.

“Hello, dear.” She sighed.

He took her hands and turned the cold water on, maneuvering her hands under the faucet. He soaked a cloth and pressed it to her skin.

“Well, that’s very nice, dear,” she said.

A bubble floated by and she puckered her lips. She blew it towards him like a kiss.

PAPYRUS OF THE YELLOW-THROATED WARBLER

DISCUSSED: Anatomy—Ancient Egypt—Betrayal—Birds—Book of the Dead—Diagram of the Heart—Dissection—Feather of Truth and Justice—Guilt—Mummification—Northern Towns—Papyrus—Scholars—Tourism—Weight

Here begin the chapters of the coming forth by day.

We were kneeling on the driveway of our rental house, our first house together, and our last. We were looking at a dead bird—small, yellow-throated and intact, tiny talons curled.

You said a bird's heart beats much faster than a human heart. Its blood races through every millimeter of its body in no time at all.

I suggested we mummify the little thing—remove its brain, a brain being useless in the Egyptian afterlife. But I got it wrong. I said the heart, too, would have to go.

No, no, you said. You shook your head. Not the heart. The heart is the only organ that stays. The heart rules the soul and the intellect. It goes with the body to the afterlife, so it can be weighed against the feather. A heavy heart is a guilty heart, and it gets eaten by Ammut, the half-crocodile, half-hippopotamus god.

No heart is lighter than a feather, I said.

Your eyes were unblinking, your beautiful eyes, a freckle in each iris. Your eyes, so light brown they could almost be called yellow. I blinked first.

Okay, you said, nudging the bird with your index finger.

For the time being, we wrapped it in a rumpled tissue you found in your pocket.

It's perfectly clean, you said, smoothing it out. It was just in case you needed it.

Let me do all the things one does on the earth, such as walking hither and thither.

The Egyptian *Book of the Dead* is also known as *Spells for Coming or Going Forth By Day*. It is full of prayers, praise hymns, instructions, and pleas: for a mouth, for breath, to prevent rotting, to maintain or regain control of one's legs, to retain one's heart.

In the afterlife, the heart is in continual danger of being snatched.

How, then, after all these prayers, with heart and mouth and breath intact, with legs that walk and bend and grow sore with use—how is the afterlife different from the present life? The Egyptian underworld seems to run parallel to the overworld, a separate but similar village, located beneath the soil but above the molten core.

But keep reading (you would say). There are prayers for avoiding work, for turning into a sparrow or a heron or a hawk, for turning into a water lily.

One must work in the afterlife? Cutting and cultivating the field of reeds? And who would want to be a water lily? A flower: tall and bright and beautiful, but inanimate? Your stem so long, so tangled, so far from your plumage, and all of you nourished by pond muck?

Come forth by day. Go forth by day. There are no prayers for night.

Offerings include: cakes and ale, barley-wheat, mud bricks, reeds.

Our rental house was on the lake, fronted by cedars that swarmed with mosquitoes. It was shake-shingled, painted gray and peeling. The back of the house was all glass—windows and sliding doors looked across the sand to the water. The lake was gray that day. It was often gray, even during summer. It was July; it must have been nine o' clock, but the sun hadn't set. You unlocked the front door and reached down to slap a mosquito off the back of your knee. You smashed it mid-bite and smeared blood across your skin.

I am silent.

From the right side of the heart, blood comes forth into the lungs. From the lungs, blood goes forth to the rest of the body. All day and night, the blood goes forth.

Thy right eye is like the Sektet Boat, thy left eye is like the Atet Boat.

For the mummification you covered the kitchen table with typing paper. You cut the bird's skull open with a scalpel I never knew you had. The blade was fresh. You scooped the brain out with a teaspoon, like seeds from a melon.

Useless brain, I said.

I touched your temple with my fingers, but you were busy. You brushed my hand away.

You sliced along the bird's sternum.

Why don't you prepare the bandages? you said.

I got up from the table. It was like a hospital in our kitchen—like a hospital and like a morgue. The ugly lamp hung from a chain above the table. Moths circled. Hospital. Morgue. Temple. Prison. You dropped the brain into the trash.

In town, fifteen miles north, drunks were staggering through the streets. Teenagers were necking at the swimming beach, clammy-skinned, their heads filled with cricket chirps. Cars drove up Jefferson, windows rolled down. Middle-aged couples strolled, licking ice-cream cones and doling out bite-sized pieces of fudge to their grubby children, who dropped lumps of chewing gum on the sidewalk. At that very moment, tee-shirt vendors were turning out shop lights and locking doors, stepping into the night, stretching and sighing.

You and I agreed: we hated candy apples, ice cream, fudge, and caramel corn. We hated fingernail polish and lipstick, suntans, and big, bright expensive sneakers. We hated golf pants and diamond rings.

But I have always liked the color of streetlight on a summer night. I lie awake and listen for the rising and falling of music as a car passes. When we met—remember? I lived above the shops in town, where I heard laughter and whistling and glasses clinking at all hours. Once in a while, a cigarette, or the chance of an unexpected whisper in my ear—the way the hair on my arms rises—the three little bones in my ear vibrate—the lips of the whisperer so close—but not touching me.

Dedication: Hair, lips, teeth, belly, flesh, trunk, fingers, breast, backbone, throat.

A note on the Papyrus of Hunefer: On his way to the afterlife, Hunefer is clothed in semi-translucent white. The outline of his thin, straight legs is evident through the

gown. Like many Egyptians depicted on papyrus, Hunefer is androgynous but for his black goatee. He is both stiff and graceful, looking ahead, holding the hand of Inpu, the jackal god. His feet, face, and hands are drawn in profile, but his chest and shoulders face forward, like a Barbie doll gone wrong, its shoulders twisted out of line by an older sibling or a teething baby.

Hunefer, I tell you, there is no turning back. The jackal god sees through your clothes, through your skin. Your heart, after all, is no longer beating inside your chest, but is even now being lowered to the scales.

Crouched beside the scales sits Ammut: bone eater, swallower, devourer of the dead. With the hind quarters of a hippopotamus and the snout of a crocodile, she can't run very fast. Her legs are too stubby. No hunting for Ammut. She is the dog of the underworld, waiting for table scraps or rawhide, waiting for your heart. It is delivered directly to her mouth.

I am a sparrow. I am a sparrow. I am a scorpion.

Since early June, I had been taking long walks in the dark. Each night, fires burned along the beach, and there were always boys drinking beer. Sometimes they threw bottles into the flames. Once I watched a boy piss on the fire to put it out—all acrid, hissing steam. His friends were gone. He was the last one. He didn't see me, standing at the water's edge, watching. He finished and lay down on the sand, outside the ring of rocks and stumps on which the boys usually sat. He stretched out on his back and looked up at the stars and the dwindling column of smoke. I walked on.

I have dipped and washed and buried the inside parts. I have dug them up.

Buried in hot sand, a body dries quickly, though not as quickly as flesh rubbed with natron, a kind of salty soda-ash. Natron dessicates the flesh, which is then opened, the organs removed. The brain is crushed and drained through the nostrils. The body is wrapped and wrapped and tucked away. But sand and natron are not the only ways. There is ice. There is the density and acid of the peat bog.

It is air and water that damage us. All our lives we need them, but in death, we are defenseless against their swarms.

Adze, chisel, little finger: Open my mouth.

You pried the bird's chest open with your scalpel while I dipped linen strips in flour paste. You were wearing your glasses. They slipped down your nose and cast shadows across your cheekbones.

You already knew about Jonah. You said you'd forgive me.

You pulled out little, indistinguishable viscera.

I asked if you would bury them with the mummy, in jars.

You didn't even nod.

You knew about Jonah. You knew I had gone with him, once or twice, to the garden shack where he slept on a cot. He didn't have electricity, but he had a bowl of peaches on a rough table. He had half a bottle of red wine. He had flat, brown, thickly callused feet. He had a frayed red rug that needed to be laundered. You didn't want to know more. You said you'd forgive me, but I didn't want to be forgiven.

I have not caught fish with bait made of the bodies of the same kind of fish.

No heart is lighter than a feather, even if the heart is small and the feather large. The average adult heart weighs between nine and eleven ounces, surprisingly light, yet heavier, certainly, than the average ostrich feather. A heart—for all that muscle and protein, the ventricles and atria and various valves, the four chambers still heavy with blood—has the heft of two cups of hazelnuts, or a stick and a half of butter.

Keep from me the stinking bones.

Where are you now? Sitting at a desk, surrounded by books, a half-full glass of water

condensing on a coaster within your reach? You take methodical sips. You run your fingers

through your hair. It's short, I'm sure. Or even shaved, so you don't have to worry about it. I

loved that about you—the minimalism: the black coffee, the undressed salad, the perfectly trimmed nails. You lean close to the copy of a papyrus pressed beneath a sheet of glass. You pause and take off your glasses to polish the lenses with the cloth you keep folded in your pocket.

I have not tampered with the plumb bob of the balance.

It was Hippocrates that taught us that the heart only beats. The heart is mere battery, while the brain is the intellect, personality, emotion, and soul. The brain became separate and superior to the body. The brain is where intangibles pulse: guilt, god, epiphany. And these? Magnetic fields flickering against the parietal temporal lobe.

I am content when I breathe his odor.

Jonah is a bartender, and a kayak guide on the lake. Paddle with a rhythm, he says. Rock a little. Sit up straight. He points out the shipwreck and how the buoy marks the channel. In September, he weatherizes summer homes. In December, he plays hockey with a broom. He runs a snow blower, clears the sidewalk in front of the restaurant with goats on the roof. He eats dandelion greens, almonds and lentils, dried fruit, day-old bagels. In the morning, he sits on the step in the sun. The mosquitoes lay low when the sun is hot. Once, he let me peel a callus from the bottom of his foot.

Heart scarab, dung beetle, quiet my heart.

In ancient Egypt, the sun was a dung ball rolled across the sky each day by Khperi, god of the rising sun--a dung beetle. Day after day, the beetle rolled its dung across the sky.

I have not stopped the flow of water.

Or I wanted to be forgiven, but I didn't want you to take me back. I didn't want you to kiss my closed eyelids. I didn't want to watch your chest rise and fall while you slept beneath our cheap muslin sheets. I didn't want to lie beside you, watching the sky through the bare window, listening to you breathe, until the leaves browned and fell and the trees stood bare, and the lake grew a new crust, and still the sheet over your chest rose and fell.

The bird didn't make it. When you pulled out the viscera the bones gave way. The body was empty and delicate and crushed, but you said: Do you want to see the heart? It might be lighter than a feather. It's very small.

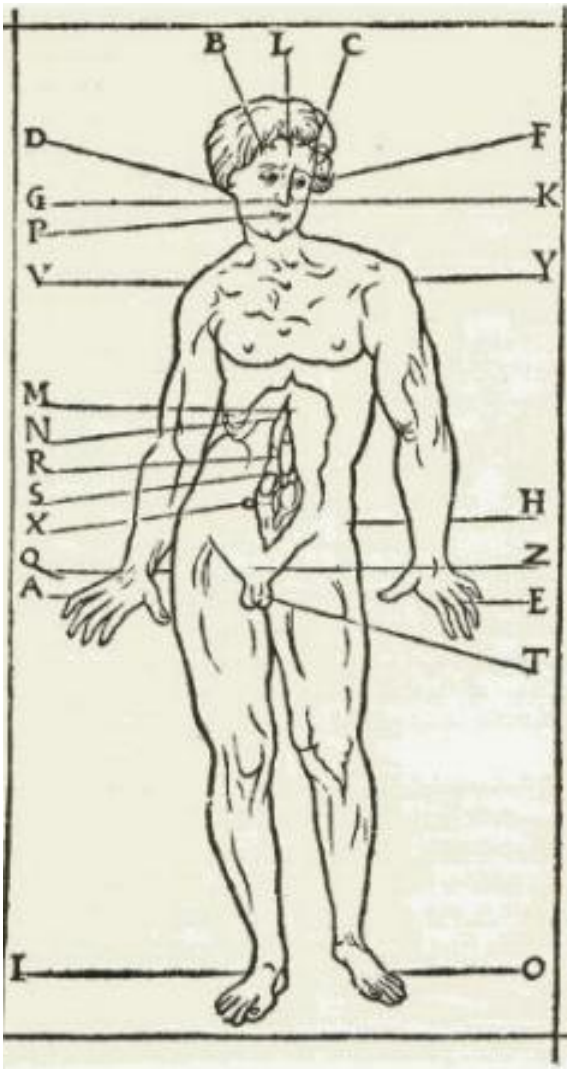
You held it out for me to see, and pulled the chest open with the tip of scalpel. I leaned in. It was tiny, severed, just sitting in there, like a raisin.

Even as Jonah traced my clavicle with a single finger, and the hair on my arms rose, I sat perfectly still, and even then I thought of you—washing your hands and drying them, so slowly, then unrolling the papyrus onto your desk. Setting your pen down and shaking your hand to keep it from cramping. The way you sometimes mutter when you write.

Jonah said, Relax.

The lake stone I gave you, smooth and pale: your heart scarab, your paperweight. How you wanted, more than anything, to be the lake.

THE MUGGED BODY



(X) like a seashell. A conch, swallowed and lodged. Indigestible. The bruising appetite. A sound like the ocean roaring: listen.

(X) is imagined. Where Quinn would have been cut if he had not given the mugger his wallet. If, instead, he had turned to face his mugger. Turned toward the knife the man had pressed against his kidney. (X) is the blade remembered, swallowed and roaring between his diaphragm and his bladder.

(D) is his sweet ear, the half-deaf one, tucked beneath his wig (coarse, blond, synthetic, also indigestible).

(G) and (K) wheeze, sticky with the soot of winter. The skies of Quinn's town are always brown with copper tailings and desert sand, with salt and particles of disintegrated brine shrimp, car exhaust, mud, and woodsmoke. Companions (G) and (K) whistled slightly as Quinn walked from the gym to his car, his keys jngling, swinging from his pinky (A). The parking lot was empty.

(I) is the ankle Quinn twisted when the mugger shoved him into the wall and ran off with his wallet. (I) was not broken, but suffered a sprain and some bruising.

(O) is the bunion that has plagued Quinn since those nights—so many years ago now--when he used to squeeze his feet into such narrow shoes. Night after night, into slippers and stilettos. A tailor's bunion, it is called, because tailors sat cross-legged to sew, their pinky toes pressed for hours into the floor. Some call it a bunionette instead--a diminutive

word, a diminutive thing. And Quinn babied his bunionette. He iced it on bad days. He named it Elisabelle, admittedly a mouthful. The pain of (O) has been dwarfed by the new pain of (I).

(P) stayed quiet the whole time. (P) did not so much as whimper. Quinn's teeth bit (P) in fear. Quinn tasted blood and salt.

If (V) and (Y) were wings, Quinn would have flown instead of stumbling and spraining his ankle. Instead of digging his wallet out of his pocket (*such tight jeans, goddamn*) and handing it over. (*The right thing to do,* said the cops. *You'd have gotten yourself gutted or killed if you fought him. Not worth it to play the tough guy. Never worth it*.) But (V) and (Y) are only shoulder blades, tattooed with mistakes. On (V): Matisse's Blue Nude, not even finished, half filled with blue ink, half hollow. The outline black. On (Y): Gerhard Richter's *Kerze*, the painting of the candle that also graces the cover of Sonic Youth's *Daydream Nation*. A white taper, the flame glowing on a background of divided gray rectangles (dark corner/light corner/tabletop). The tattoo is horribly faded. Quinn regrets the failed dimensionality of both tattoos. Representations of representations. Flatness that undulates with his skin. *Next time,* Quinn says, *an anchor*. *Next time a mermaid.*

(B) is the eyebrow Quinn arches when skeptical or joking.

(C) is the eyebrow he cannot control.

(L) is his furrow of worry or guilt. A deep crease.

(E) is the finger that pointed at an innocent man in the lineup. It had been dark, after all, and panic distorts memory. Certainly, it had been a man. A man a little taller than Quinn. A man with hot breath. With a voice that was almost a whisper. Yes, it had most certainly been a man. A man that smelled of onions. But the lineup was too far away for Quinn to smell, and it was sealed behind glass. Anyway, it had been hours since the man had pressed the knife against Quinn's ribs and prodded at his kidney. The mugger may have brushed his teeth since then. Quinn pointed at the most oniony man of the bunch. The one whose skin was nearly translucent and webbed with tender blue. The one who looked the most heartless.

Anatomy texts label (H) the *iliacus*, but David, Quinn's lover, calls (H) "cupid's arrow." It is one of David's favorite body parts. He says the arrow is definitively male. *Oh, the superior musculature of a man's hips,* says David, tracing Quinn's arrow with his finger. They are home, finally. The mugging over. The lineup over. The pointing over. *Such perfect geometry,* David murmurs. His finger makes its way along the arrow to Quinn's left testicle (T), which is a smidgen smaller than his right one (unlabeled). David rolls (T) between his thumb and forefinger—a decidedly unsexy move. It feels vaguely medical to Quinn, but then David replaces his mechanical fingers with his soft mouth and Quinn leans back against the pillows.

Later, in the dark, (F) hears David's chortling snore, hears hail strike the window. (F) hears the cat crying (she is trapped in the cabinet with the toaster and the blender. She is hungry.) (F) hears the mugger's raspy voice, over and over: *Quiet now, mister. Real slow now. I want you to reach your hand in your pocket and take out your wallet. Slow now. Quiet now.* (F) hears the sandpaper voice. The lips that opened for the voice had been so close to (F). So close. The oniony breath had entered (F). And the words—*Slow. Quiet*—set (F's) little bones vibrating. (Because (F) is full of little bones and whorls and tiny hairs that keep Quinn upright.) (F's) little hairs trembled. Quinn tries to sleep, but over and over that fine grit voice, that not-quite-a-whisper. But in the morning (F) hears traffic and bird songs. Bird songs in midwinter. Birds singing in all those black, leafless branches, those angry naked branches. So full of birds. (F) hears wings flap and scatter. (F) listens.

*The image is taken from Geoffroy Tory's book *Champfleury,* published in1529. Tory was a French engraver, typographer, and author with an idiosyncratic theory regarding fonts and the relation of letters to the human form. He is best known for introducing the apostrophe, accents, and the cedilla into the printing of the French language.

THIS PRECARIOUS HIVE: *DENTURE HOUSE* at MOMA

During summer of 2011, two unemployed graduate students were hired to care for the withering grandparents of Salt Lake City, Utah. As employees of the Elizabeth Cutler Haven House, Natalie Carson and Luisa Moulton spooned Jell-o cubes and creamed corn into so many mouths. They changed sheets and pushed wheelchairs, led games of charades and singalongs. But while the elderly slept, Carson and Moulton stole their teeth for the sake of art.

Denture House,[2] the third collaborative work of the artist duo Natalie Carson and Luisa Moulton, is a six foot tower of dentures and other dental material the artists stole from the residents of Elizabeth Cutler Haven House, an assisted living home where they worked from June 2011 through January 2012. It is the first of their collaborations to explicitly take the form of Art (with a capital A), and their first sculpture. Their preceding collaborations were ephemeral, spontaneous "performances" that went largely undocumented and left no permanent artifacts.[3]

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[2] Natalie Carson and Luisa Moulton. 2012. Dentures (acrylic resin, silicone, porcelain), Dental crowns and bridges (alloy, ceramic, leucite), teeth, apoxy.

[3] Potentially apocryphal: when questioned, the artists refused to discuss such "juvenilia."

First, Carson and Moulton gathered a "bouquet" of 500 flowers from various gardens in Natalie Carson's neighborhood and left them on the doorstep of Esther Shafak, a friend who corroborates the story in *ARTnews* (May 2013): "There were lots of tulips, some daffodils, and a lot of things I couldn't name heaped on my doormat. I couldn't get past them. The ones on the bottom of the pile were already turning brown and the entire hallway smelled sweet and rotten. It must have taken them hours, and they left the neighborhood gardens looking a little bald. There were actually bees hovering around the flowers…I say there were 500 because that's what Luisa said when she confessed that she and Nat had were behind it. She told me a week or so later, after having denied responsibility at least 3 other times…No, I don't think it was a joke, but rather that they

Carson and Moulton worked at the Elizabeth Cutler Haven House for less than seven months, but in that time they managed to acquire 72 pair of dentures and an assortment of crowns and bridges. The sculpture includes 4 gold and 7 ceramic crowns, 4 dental bridges, and 14 natural teeth, many with extensive decay indicating they probably fell freely from resident mouths, or were removed by dentists. It is unclear whether the women acquired these pieces by coercion, natural "shedding" on the part of their charges, or manual removal. The artists claim that all the teeth were given freely or stolen when residents had removed them from their mouths for cleaning or sleep. If the teeth were taken while the residents were sleeping, the victims must have been out cold to sleep through the removal of even their most rotten tooth. When speculating along these lines, it's necessary to consider that the sound sleep was due to pharmaceutical aids administered by the women. While this is pure conjecture, it must be noted that Carson had a prescription for Eszopiclone (Lunesta) which she refilled regularly. When arrested, she also had a partly used package of Nyquil gel-caps in her purse. After Carson and Moulton were arrested for larceny, police found dental tools in Moulton's residence, but Carson and Moulton have consistently denied charges of such foul play, and as only one resident of the E.C.H.H. has ever posited such a claim—a man in his nineties who suffered severe dementia, and is now deceased—no charges have ever been pressed.

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meant to do something nice for me. It was a gift…She said they started stealing flowers from gardens, and after they'd gathered about a hundred they set a goal for what they thought would be really excessive, and then they counted aloud as they picked."

In the second reported project, Carson and Moulton filled diffuser air fresheners with urine. ("Diffuser" air fresheners are jars filled with scented oil. "Sticks" are inserted into them like flowers in a vase. These sticks, which look like incense, absorb the scent and disperse it into the air around them.) The artists distributed jars to the restrooms of 2 local cafes where Carson had previously been employed (and quit), and to a bakery where Moulton had been employed (and fired; reasons unknown).

The dentures and other accoutrements balance on and in each other, affixed with epoxy, which is neither acid-free nor archival, but since dentures are designed to dwell for as long as possible within the corrosive chemistry of saliva, the sculpture is projected to have extensive longevity. Dust is its greatest enemy.

The artists dubbed the sculpture a "house,"[4] though the interior cavities do not appear as dwelling spaces for anything larger than a bumble bee. In fact, the sculpture appears hive-like in its intricacy and repetition. In a 2013 interview with local news and gossip monthly *S.L.U.T.* (*Salt Lake's Ultimate Tattler*), Carson stated that the she and Moulton may have been subconsciously influenced by the culture and icons of their community. About half the population of Salt Lake City belongs to the Church of Jesus Christ and the Latter Day Saints [5] (LDS, or "Mormons" in vernacular, though some find this label derogatory). In 1844, church leader Brigham Young designated the beehive as the symbol of the church, and eventually of Salt Lake City and the state of Utah.[6] There are beehives everywhere: on manhole covers, on the state flag, capping stairway

[4] House. Home. Dwelling place. Refuge. What makes one? Narrow painted clapboard and tomato plants? Textiles and five different light sources per room? An affectionate pet? A well-stocked refrigerator, including olives, whole milk, and blueberry Stilton? But a cave could make a lovely home, with a few burning candles and 5 or 6 books stacked next to a pillow stuffed with the soft fibers of cattails. A coastline. Rainy winters. Rusted warehouses. Twilights that turn high green leaves golden.

[5] Although the percentage of LDS members along the Wasatch Front is far higher, the percentage of believers within the city proper dipped below 50% for the first time in 2004 and has continued to decline. This "urban decline," however, is somewhat misleading as the LDS church is the fastest growing faith in the world, and in the state of Utah, LDS members make up over 60% of the population.

[6] The state motto is "Industry"; busy little bees.

banisters, and even, occasionally, as the focal point of some fabulous tattoo.[7] In the same 2013 interview, Moulton professed some confusion over the symbol:

"Everybody knows a hive is run by a queen. All the drones, which are asexual, are at her command. Brigham Young had 80 wives—he was most definitely the queen bee—but it seems the church confused the gender roles. Brigham Young was not effeminate. And his wives weren't asexual, at least not as far as I can tell. And they sure had a lot of kids. The Mormon church is incredibly patriarchal, but a beehive is the ultimate matriarchy."[8]

Why the artists chose to steal dentures has never been clear; even during their trial they failed to explain. Carson and Moulton plead guilty, and were convicted of theft in winter of 2014. They did time in low-security prison (Carson was imprisoned for 2 years, Moulton for 18 months[9]). Even after the trial, few of the E.C.H.H. residents wanted their teeth back, and many of them were dead. During her testimony, Moulton confessed that the artists often stole the dentures of already-deceased residents. When preparing a body for funeral services (if there was to be an open casket viewing), the mortuary employees often assumed the person had misplaced his or her dentures during the fading days of life.

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[7] The LDS church, it should be noted, states on its website that "Latter-day prophets strongly discourage the tattooing of the body. Those who disregard this counsel show a lack of respect for themselves and for God." These beehive tattoos must, then, adorn the skins of rebels and non-believers, indicating that the symbol has transcended its religious roots and become an emblem of local pride, ironic or otherwise.

[8] Ginger Tanner. "Artist Duo Arrested for Denture Theft." *SLUT*, June 15-22, 2013.

[9] Time in prison proved remarkably productive for the collaborators. They completed and planned multiple works, including the much lauded toilet paper mâché cast of Moulton's biceps (*Prison Biceps,* 2014. Toilet paper, water, flour) and the associative map of the Stewart Low Security Prison (*Hive Map*, 2014, graphite on paper).

Occasionally, a set of loaner dentures was fitted into the deceased's mouth for the viewing, their lips pressed closed to disguise the mismatched teeth. "The wrong pair of dentures makes a familiar face look remarkably strange, changing the person's appearance to a degree that makes them unrecognizable," says Carlton Ensign, Director of Ensign Funeral Home in Salt Lake City.[10] These loaner teeth were often removed before burial or cremation, unless the loved one's beliefs stipulated that the body would be restored as-is in the afterlife, in which case the loved one would need whatever teeth he or she could get[11] in order to chew the beef and sugar plums of eternity.

Of the denture theft victims still alive at the time of the artists' arrest, many were pleased to be part of an artwork that would outlast them. Some families initially appalled at learning their loved one had been robbed of teeth or dentures eventually bragged it. "Who would do such a thing? Steal dentures? It's just disgusting," said Ericka Roundy, daughter of former E.C.H.H. resident Kenneth Roundy, whose dentures are included in the sculpture. "At first we were angry, but Dad was dead by then. Honestly, my Dad would think the whole thing pretty hilarious. I mean, it's super creepy, and those women are definitely sick, but we have no need for Dad's teeth. And the piece is in New York now, at MOMA, which is pretty cool. When it was still here in Utah we would take

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[10] Carlton Ensign. Telephone Interview. November 12, 2014.

[11] Being Platonic, most Christian denominations believe the body will be restored to its "most perfect" state during rapture, that God will correct any challenges the body faced in its earthly life. The lame shall walk, the bipolar shall exalt without ever swinging back to weeping and lamentation, etc., etc. By this system, no one will need a set of crappy dentures in the afterlife; every body will be will reborn with a set of straight white teeth. This raises questions far more complex than the writer is prepared to address in this article: will there be *bodies* in the afterlife? Will there be *time?* And *ages*? And what would be the most perfect age for the body? Will every person be the same ideal age, with adult teeth, perfect muscle tone, taut, gleaming skin? (*How dull is Heaven?)*

visitors to see it. I mean, it's so weird, you know? But then, it's pretty much a given that there's a serious history of mental illness in the art world."[12]

Natalie Carson expressed that the sculpture is, in part, a monument to people who "navigated the travails of life for such a long time." The artists seem to think they should be elevated to the status of keepsakes, monuments, or holy relics. "Teeth are one of our most distinctive body parts," said Carson. "Bodies are easily identified by dental records, and while dentures are not the same as natural teeth, I have always thought that we should keep teeth to remember our loved ones. They're far more personal than photographs. They're our best tool for breaking down food, for beginning the necessary transformation of food into usable energy. And if you think of the soul as light, as *energy*—and I do—teeth are practically the gateway to the soul."[13]

Carson's statement evokes the reliquaries of dead saints one finds in cathedrals and churches throughout Europe—tiny boxes filled with teeth or bones or the shreds of burial shrouds.[14] And Carson was indeed raised Catholic, but attended Mass (in English, not Latin) only until the age of thirteen, when she refused to attend ever again.

"Well no, it wasn't okay with us," said Dominique Carson, Natalie's mother, of Natalie's lost faith. "But Nat was a headstrong girl. She locked herself in her bedroom and refused to answer my knocks. We were going to be late [for church], and it's not like

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[12] Ericka Roundy, personal interview, November 7, 2014.

[13] Helena Robins. "Bite, Gnash, Nibble." *ARTnews,* May, 2013.

[14] The writer once viewed the knucklebone of Saint Catherine in a French cathedral, and in Bulgaria, she saw a lock of hair nested in a tiny wooden box that purportedly came from the scalp of Saint John the Baptist. The writer was skeptical, however, of this second relic because the hair was honey-colored—a golden curl—and John, having been from the Middle East, was most certainly a dark-skinned man with dark hair).

I was going to break the door down, so we left her alone. That first time I grounded her, but even at thirteen she was able to articulate the reasons she did not believe in Catholicism, so she was allowed to stay home while the rest of the family attended Mass, as long as she agreed to do something spiritual during that time."[15]

When asked what sorts of "spiritual" activities Carson participated in, her mother said she was never entirely certain, but that Natalie meditated sometimes, and that the girl spent hours sitting on the porch watching birds feed. "Hummingbirds and Red-winged blackbirds. She said 'nature' was her church." It's rumored that in her later teenage years, Carson created elaborate rituals, including the (burnt) sacrifice of mundane objects (pencil erasers,[16] shoelaces) and bodily cast-offs (fingernail clippings, eyebrows) to various gods and spirits.

Carson's fixation on keepsakes and the material remains of loved ones may stem from a tragic back story: the loss of her younger brother Edward when he was only nine years old (Carson was twelve; a year later, she ceased attending Mass). Edward died of leukemia, even after a bone marrow transplant (Natalie Carson was his donor), but Carson has consistently refused to discuss the loss of her young brother.

The genesis of *Denture House* occurred on Carson's porch during the summer of 2012, when Carson and Moulton were perusing employment ads on the local website *ksl.com*. The two were graduate students,[17] and lacked stipend or employment during the

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[15] Telephone interview with Dominique Carson, November 12, 2014.

[16] Pencil erasers smell absolutely horrendous when burnt.

[17] Carson in Cultural Anthropology; Moulton in Art History. Had they been more driven, they would probably have had internships or research projects during summer, as did most of their colleagues. Moulton admits she was depressed and drinking too much,

summer months. They spent the month of May drinking whisky and gin and chalking stories on the sidewalk (their longest story spanned 17 blocks, one sentence scrawled in all-caps at each intersection and accompanied by taunts of "To be continued"), but by the end of the month, they were desperate for money.[18]

It was Carson's half-birthday, and Moulton had baked a cake, sliced it in half, and frosted each half with pink and white buttercream. The platter was heavy; the halves slightly lopsided. The women drank gin and tonics with their cake, and watched people bicycle past. Carson went into the house for fresh drinks and when she returned, a small tissue-wrapped package rested on the porch rail. She unwrapped layer after layer of tissue, finally reaching the gift: a human molar on a gold chain.

"Wow!" she said, holding it up. The tooth swung back and forth, tic-toc. "Is it real? Is it yours?"

"I got it on Etsy years ago, but it seemed just right for you. Yeah, it's real."

Carson inspected the tooth. The roots were much whiter than the crown, which was distinctively yellow.[19] "It's huge!"

"It came with a tag that named and described it's original owner and stuff, but I lost it. I think it belonged to an old man."

Carson put the tooth on. It rested in lowest part of her V-neck.

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while Carson professes a lifetime of underachievement, lack of planning, and "general bafflement."

[18] Here, the writer takes "biopic" liberties, reconstructing the birth of "Denture House," based on conversations with the artists. Dialog is not verbatim.

[19] The writer has seen this necklace, which the artists excluded from the sculpture because they did not know its owner, and because Carson still enjoys wearing the necklace. It appears to be a wisdom tooth, though the artists, despite their intimate knowledge of teeth, were unable to confirm my observation.

"Sexy," she said. "I love it." She raised her glass, took a gulp, then leaned over and forcefully kissed her friend's forehead.

Salt Lake City is a banking town, and south of the city is one of the world's craft industry hubs,[20] but the employment ads were sparse. The Elizabeth Cutler Haven House was offering $15/hr for aides (*will train*), a respectable hourly wage in their small city.

"I could do that," said Moulton. "I like old people. They've got stories."

Carson nodded. "But you might have to change diapers and wipe asses. And dementia is godawful depressing."

"I don't think it would bother me. It might even be fun. It taps the imagination, makes for good stories."

Carson made air quotes: "Even dementia can be fun," she said. "You should get that on a tee-shirt."

"No, really. What if you think of it like hallucinatory drugs?"

Carson laughed. "Okay, Lu. You should do it. Really. I'd love to be an elderly person in your care."

"Think of all the tooth necklaces one could make in a place like that. An endless supply of materials. Tooth embezzlement," said Moulton.

And so they combed their hair and buttoned their cuffs. They were hired on-the-spot. But how did they do it? How did they acquire the teeth? And didn't their charges notice that their dentures were missing?

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[20] Scrapbooking and rubber stamps.

"Sometimes we just asked for them," said Moulton.[21] "The residents liked us. Okay, we may have taken advantage of their exhausted judgment sometimes, but mostly it was easy." She waved a hand as if parting a curtain, conjuring the scene. Her storytelling voice was slower and deeper. "The old lady leans back against her pillow. Sleep. Finally, sleep. She slips her dentures from her mouth—*slurrrp*—and drops them into the glass of fizzy water. She's off to dreamland, galloping with wild horses, shimmying up ship's ladders. From the hallway, I crack the door. I listen for her breathing, that soft, sandy rhythm. I slip in, fish the dentures from the glass with a pair of tongs, drop them in a zip-loc, and leave behind a daisy or something. And voila! You've been visited by the tooth fairy, darling dear."

Before the writer viewed *Denture House,* she expected something morbid, humorous, and creepy: 72 sets of dentures, 72 frozen grins. So many disembodied gnashers poised to tapdance, threatening a nip. And the sheer number of teeth did not disappoint. The slick pink gums: pale or peachy or ruddy, purple-edged and dark, rising like the wings of butterflies, lumpy and gleaming, glistening like chewing gum, the satin petals of poppies and roses. Rows of teeth, so perfectly imperfect. Replicated overbites and underbites. Sharp canines and gaps and yellowings. Whole sets and half sets, biting and yawning.

But the tower isn't the stuff of nightmares. And it's only funny for a minute. And then the pink caves, the gaps and arches and tunnels, the missing mouths, the missing faces, the missing bodies and lost voices invite you closer: enter these tiny ballrooms.

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[21] Personal Interview, December 1, 2014.

Rest in these tents of childhood summers, this ripstop-filtered sunlight. Even bees doze in this sleepy light. The pollen settles. In this precarious hive of souls.

Denture House is included in MOMA's *Dust to Dust: Sculpture and the Afterlife*, September 15-February 3. It is part of the museum's permanent collection.

WE ARE A TEEMING WILDERNESS

I can tell you the exact date that I began to think of myself in the first-person plural — as a superorganism, that is, rather than a plain old individual human being…[These several hundred microbial species with whom I share this body] which number around 100 trillion, are living (and dying) right now on the surface of my skin, on my tongue and deep in the coils of my intestines.

-Michael Pollan, "Some of My Best Friends are Germs"

Do I contradict myself?
Very well then I contradict myself,
(I am large, I contain multitudes.)

-Walt Whitman, "Song of Myself"

We, the superorganism known as "Glenn," often envision an infographic of ourself in the shape of a man. This infographic is a veritable stained glass window of colors and shapes. We imagine our mouth shape as red, esophagus yellow, sinuses green, gut purple, and stomach orange. Our brain is a quiet gray, unless pulled out for close focus in an infographic of its own. Our groin is a fecund garden. Under a microscope, our groin would appear as a jungle, full of tiny monkeys climbing on wiry trees. The groundcover absolutely crawling with life. Blooming and dying and blooming.

Sometimes we, Glenn, swap cells with other superorganisms. We've exchanged plenty of gypsy microbes with the superorganism that goes by "Sophie Izbal." Sophie is a garden, too, of course, a verdant Eden. Her infographic would be more purple than ours—female superorganisms have longer intestines—and her jungle includes a tropical cavern. With Sophie, we cross-fertilize. We diversify our ecosystem. Some of us who are now Glenn used to live in or on Sophie. We traveled in caravans from pink cave to red cave. From freckled arm to eyelash. Some of us have even returned to Sophie after a foray into Glenn, and the heartiest of us have traveled back to Glenn yet again. With Sophie we have open borders.

Once, we, Glenn, took a course of penicillin. We had been invaded by an army of streptococci (yellow, fanged). The penicillin slaughtered most of us, along with the invading army. Our cell walls disintegrated. We were naked and tender, as vulnerable as amphibian eggs nesting in a creek bed as the oil spill rainbows nearer, as the mist of Roundup Ready settles over them like a veil. Countless numbers of us shriveled and died. Dead, we traveled the purple byways of our body. We coursed through the blue tributaries, rested in the dark brown pools. We joined the other carcasses for the exodus. Our tiny bodies lay in drifts. For a time, Glenn was sparsely populated, almost a ghost town. It was a terrible time. But those of us who remained began to recolonize. We accepted new settlers, begging them off Sophie, off hamburgers, off lettuce and doorknobs. We were homesteaders as we had never been before.

When we, Glenn, feel sad, many of us become wanderers in the weeping. We become sailors, adrift on the Sea of Tears, which only bursts its banks occasionally. Our body contains a rust colored ocean in the lining around our heart. We live on a crust of salt on the surface of our eyes and in the tunnels of our nose. We rest in the pockets of our skull—we call it The Cave of Montesino. Sometimes, we get restless. But like Sinbad the Sailor, we vow to stay, stay, stay. This time, we will remain. We will drift on our homey, stagnant ponds. But just as we settle in, the tide rises. In a splash, we roll down our cheeks. We encounter exotic foreigners—desert dwellers used to traveling by wind or fingertip. We come to rest on sleeves or tissues. Sometimes, we are licked by the swift, broad tongue of the dog. We travel on that meaty sail until the dog licks the baby, or itself, and then we find new resting places. We set up camp in waving fields of fur, or on the smooth powdery expanses of a chubby thigh. We stake our claim in the hot dark crevasse of baby's elbow.

But we, Glenn, are also raging xenophobes. In particular, we are nervous about silverware in restaurants. We know that the community in a dishwasher is dense, hostile, and well-fed. Those fierce creatures scoff at detergents, eating gravy and whatnot, eating each other, dividing and dividing and dividing. We know that the hands of the workers are wild gardens, too, overrun with weeds and creepers. We picture their dark rituals, their strong armies, and we quiver. So when we, Glenn, dine in a restaurant, we bring our own silverware tucked into Sophie's purse, sterilized in boiling water and a splash of alcohol, wrapped in starched linen and sealed in a zip-loc. Sophie sometimes expresses irritation at this practice, but she puts up with it for the sake of peace. She kisses us, and

smoothes our brow. We love it when she smoothes our brow. Some of us take the opportunity to jump ship. Escaping on the tips of her fine fingers, we become Sophie.

We take comfort in each other. We, Glenn, tell ourselves that Glenn used to feel lonely, back when we thought of ourselves as singular, back when we called ourselves "I" and "me." *How foolish*, some of us say, *that loneliness, that oversight*. But some of us protest: we feel criticized. Well, we were all so quiet back then, we tell us, and those of us in the mouth dance and scoot and shuffle like so many Pop Rocks. Gently, we run our index finger along our arm, gathering a cocktail party in the whorls of our fingertip, and we kiss that fingertip, some of us leaping from lips to finger, others from finger to lips. We, Glenn, are never alone.

THE HEALING MACHINE

Nebraska

Maybe it was summer. Call it hazy July, 1935. Emery took a break from his mother's bedside and walked the hills. Grass and sand, roots anchoring it all so loosely, but for such a long time, and below that the aquifer, quiet and dark and invisible. In low spots, the water seeped through, forming ponds and swamps. The toes of his shoes grew damp.

The cranes were his company, with their black, backhinged knees, their stalk legs and black-tipped feathers—gray, soft and draping—their red eye patches. Had he missed them when he was away? Had he thought of them? Their long necks and those wings that could wrap a man and hold him, if only the birds were less shy? A five to six foot span—overwhelming. What did they sound like, the cranes? A ratcheting squawk, like something wooden was caught, rattling in their throats. And that step-step-wild hop-flap of a mating dance. The approach. The circling of the desired. The endless cavorting.

From above, nowadays: irrigation crop-circles and perfectly straight roads. Nothing to go around. Nothing to go over. The sandhills roll like tumors (try again.) Like goiters bubbling from the earth, but rippled and waving, those empty, endless, grassy dunes (try again.) They move like pelts.

He would bury his mother there, in January. Chip away at the frozen soil of Custer County and heap it back again. And later, he would bury his father there, too. Stomach cancer took his mother. Lung cancer his father.

Photograph #1 (circa 1972)

Emery Oliver Blagdon sits at a table. The soft, filthy brim of his cap is folded upwards. Yellow light comes through the window behind him and his eyes gleam with the reflection of it. His beard, shaggy and white, overwhelms his face. Tools hang on the wall behind him. The counter is heaped with boxes and tins, loops of wires, crumpled paper, a heap of dirty rags. Squinting, you can make out the label on an old canister of Nestle Quik. His face is tilted downward, but his eyes meet yours, quiet and certain.

By the time of this photograph, he had lost both parents and three siblings to cancer. He leased his 200 acres to his younger brother, for farming, but he lived in the house and built his Healing Machine in the shed. When he died, in 1986, his body, too, was riddled with cancer.

Photograph #2 (circa 1979)

Shoelaces untied. Grinning and unbuttoned. Gray-white beard, overgrown and frizzy. Scaly elbows. Blocky brow. Thin line of hair on his chest. Suntan fading midsternum. His belt is buckled, but the end, untucked, curls back. On his pinky he wears a thick silver ring. Wide, knobby-knuckled hands—one pressed against his stomach, the other hanging at his side. He is not wearing the copper bracelets meant to relieve joint pain (blood was thought to absorb the copper by osmosis, through the skin). Daubs of

paint mark his forearms. Around him hang various wires and paper pieces of The Healing Machine.

Born in Callaway, Nebraska, in the Sandhills, Emery rode the rails during the depression. Looked for gold in California. Visited home now and then. His eight maternal aunts and uncles were scattered across the Garfield Table in their nearly identical houses. His was a family of Es: Edward and Emma. Ethel, Emery, Edward, Jr., Edna. He fixed tractors and bicycles. Built mechanical toys with moving parts for his nephews and nieces. Painted the kitchen wainscoting silver. Grew his vegetables in an unwieldy garden. Concocted peanut-butter watermelon cakes. Loved the Fourth of July and his own birthday. As he aged, his eyebrows softened and his hair grew long.

Labels

Folk artist. Outsider artist. Self-taught. Working-class. Builder of vernacular environments. Visionary. Tramp. Naïve. Primitive. Intuitive. Shaman.

He called himself a scientist. Channeling electromagnetic energy through wire and glass beads and wood and paint and scrap metal. And salt. Most important, those mineral salts.

In Mr. Wilson's Cabinet of Wonder

At first all you've got is a few disconnected pieces of raw observation, the sheerest glimpses, but you let your mind go, fantasizing the possible connections, projecting the most fanciful lifecycles. In a way, it's my favorite part about being a

scientist—later on, sure, you batten things down, contrive more rigorous hypotheses and the experiments through which to check them out, everything all clean and careful. But that first take—those first fantasies. Those are the best.[22]

Definition: Machine

A machine is an expedient remedy. Does it necessarily have moving parts? Does it use or transfer energy? A stapler is a machine for hinging pages. An eye might be a machine. The way it gathers and condenses light. The way it flips the image. The eye is an expedient translator. Is a mattress a machine? The way its coils return equal and opposite pressure against the [resting] [tossing] body? Is it only a machine when the body presses against it? Does it make expedient sleep? Is a sweater a machine? All those interlocking fibers trapping and pocketing body heat? A bobby pin, inserted into the hole on the clothes dryer (which is certainly a machine) where the start button fell off and disappeared into its own hole, might successfully start the dryer, but there may be a few sparks. Some smoke and burnt plastic. Is a cat a machine? For its pinions and joints, its many moving parts, its balls and sockets and tendons and claws? This transference of energy is an expedient remedy for loneliness.

Copper Is a Soft Conductor

Emery wore a bracelet on each wrist, copper being said to ease the pain of arthritis. He was double-cuffed. He had terrible arthritis. The fluid in his joints—where did it go? A leak somewhere and the fluid seeping out, leaving the bones, the cartilage,

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[22] Tom Eisner, quoted in Lawrence Weschler, *Mr. Wilson's Cabinet of Wonder*. (New York: Vintage Books, 1995). quoted in Leslie Umberger (see source note).

glancing off each other, too close. Wearing away. A knock or two. The quiet drag and scrape. Then the swelling.

As Described by Edna

Sure, he wore overalls a lot, but so do most of the men around here. Sleeves rolled to the elbow. Always a button or two missing, or just left unbuttoned. He could be careless like that. Haphazard. Floppy. Maybe that's the word for it—there was a floppiness to him. After the buttons fell off his shirt, he'd keep it closed just by tucking the tails into his waistband. Pants rolled in big cuffs—a little stiff 'cause they were so dirty. Yeah, he was always kind of dirty, but he did his own laundry once a week. I brought him a plate of food once in awhile, and he ate dinner over at our place pretty often, but mostly he took care of himself. Dried his pants on the line. His beard? Yeah, well, I cut his hair for years until he got strange about it. The last time I cut his hair he fainted dead away. Fell right down on the floor in a heap. Fear, I guess. He was so afraid of the pain when the scissors cut through his hair. And he thought his hair had power. Like Sampson in the Bible? When he heard the blades he just fell right over. Poor thing. That was the last time. He just let it all grow after that.

Coining the Charges

It was [Benjamin Franklin] who coined the terms, positive and negative charges. He defined the negative charge as one which is similar to the charge produced by

stroking hard rubber with fur, and a positive charge as one similar to that produced by stroking glass with silk.[23]

Photograph #3

In the kitchen, starting at the ceiling light fixture, he painted a radiating series of red concentric circles across the room, filled with alternating green and yellow bands of color. He treated the kitchen wainscoting with silver radiator paint and the walls above with a shiny pale pink, with green half circles where those walls met the ceiling at the corners, and he detailed the light bulbs with stripes, dots, and other shapes.[24]

He baked bread. He stood at the stove, stirring a pot of soup, boiling an ear of corn. He took off his shoes. He scuffled along in his underwear.

While He Was Building the Healing Machine

Nikola Tesla was dead and had been dead for nine years, plenty of time for his orderly hair to lose the grooves of the comb, for his moustache to stop growing, and his skin to shrivel and decay and bare that thin skull. Time for the electricity of the brain to fizzle out and depart (to where? All that trickling, itinerant energy). In Emery's kitchen, the radio fizzed and popped and spoke the news to him while he baked. (Radio: a

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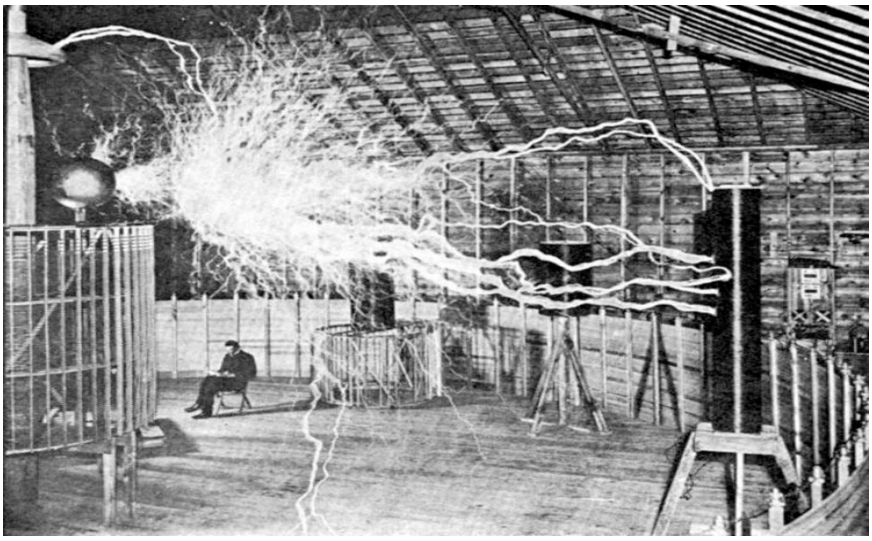
[23] In the 1970s, a local teacher gave Emery a science textbook, *Matter and Energy,* by Arthur Talbot Bawden. It is from this book, a copy inscribed in cursive with the name "Edith Pritchard," that this quotation was culled.

[24] Umberger, Leslie. "Emery Blagdon: Properly Channeled." *Sublime Spaces and Visionary Worlds.* Princeton Architecture Press. New York. 2007.

machine. Antenna extended, it captures only those waves to which it is tuned and lets the others float by uninterrupted.)



Eisenhower was elected president. Alaska and Hawaii became states. Kennedy was elected president. Kennedy was shot—the bodies in the convertible ducked and sprawled. Kennedy died. The US continued hushed entanglements in Vietnam. LBJ took over the presidency. Heaps of papers were signed (the pens, now steeped in the magic dust of history, were given away as tokens, framed and hung above fireplaces). LBJ was elected. Hushed entanglements roared. The marchers on Selma were blasted in the streets with high pressure water hoses, yanked by arm, by leg, by neck. They were struck with billy clubs. The girls were burned in the church.

Andy Warhol had an old warehouse space—The Factory—papered with foil and spray painted silver. *A good time to think silver*, he said. Foil. Knife blades. Photographs. The mechanized production of Elvis, over and over.

Millions of veins were cauterized. Over 20,000 people were lobotomized. Electroconvulsive (Shock) Therapy gained and lost popularity for treating depression, mania, general psychosis.

Nixon was elected. Ford was elected. Carter was elected. Reagan was elected.

After His Father Died

Emery started tatting wires. His pretties. Twisted wire shapes that he hung side by side from another wire. Mobiles. Windchimes. Parts of machines. Some like the coils from the insides of old mattresses. Baling wire doilies. Wrapped and knotted and dangling. In Edna's living room, he tatted. Beside him, Edna knitted.

Photograph #4

Rows and rows of wires. Copper wrapped boards. Waxed paper-aluminum-waxed paper sandwiches. Little scrolls of tin. Snarls and snags. Drifting squares of salvaged metal. Bright beads, glass and plastic, paint.

Inside the Healing Machine

He built it in the barn first, but the roof collapsed, pulled down by the pretties and nails and paint and magnets and jars. He salvaged the wood and built a two room structure, low ceilinged, the work space and the healing space side by side.

It was kind of comical watching him do something; he'd wiggle around there awhile, [and] sometimes he'd [lay a piece] down and leave it right where it was, pick it up, and pretty soon he'd start tinkering with it again.[25]

Sometimes people said they felt it—the energy—healing them, buzzing through the wires. Your arm hairs rippled if you stood in the middle of the shed. Goosebumps rising across the surface of your skin: right arm, small of the back, up the spine, nape of the neck, down the left arm, wiggle fingers. In the soles of your feet: the hum of the earth, the soil, the heat, the aquifer. You knew it was there. You were engulfed by twinkling lights—cheap, twisted Christmas strands--and the wood, so splintered and warm. There was the scent of paint and dirt and oil. Wire-wrapped jars. The taste of copper on the tip of your tongue. Your knees loosened a bit, as if the ligaments had been untied, then retied in a floppy bow instead of knot. Your stomach touched your shirt when you breathed, the kiss of cotton and skin cells. The buzz moves through your neck, out your skull, into the tip of each hair on your head. You might want to lie down, press your cheek to the painted board, but then, you might rather conduct the energy. Conduct it, as if a symphony, the flutter of electrical current coursing through your raised arms, the braided energy of the earth passing through your hands and out the end of your baton, filling the room. You, a lightning rod.

Maybe it was Emery's energy they felt—the hours he put into painting the wooden panels with those muted bright colors, gluing beads to the panel, twisting, twisting, wire after wire after wire, attaching this bent fork, that tin plate, hanging a vial

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[25] Ben Fox, interview by Dan Dryden, November 1987, quoted in Leslie Umberger.

of salts, emptying crystals onto a glue-smeared board. Bending a coat hanger. Cutting his thumb on the serrated edge of a can. Moustrap, pie tin, baling wire, ribbon, and wax circuit board.

But some people felt nothing. They saw the paint on the boards, the light glinting against glass and wire, the spinning, dangling, sharp-edged tops of coffee cans. And they felt nothing.

He Went to the Pharmacy

He said, "I'd like to buy some earth elements."

He was so intent on his inquiry that I took him seriously—which, to look at the man, you wouldn't really. "Elements" is a broad category, I thought. I tried to ask him what kind of elements he wanted, what he was doing with them. He said he was building machines—magnetic machines—machines that had electrical activity. So I thought the only elements I know, per se, having any electrical activity are simple earth salts—mineral salts. This guess turned out to be accurate…I offered to give him some. I went back to my wets-and-dries counter and filled up various vials with these powders—salt powders, crystals, sodium chloride, maybe some sulfur and a few other inorganic compounds. I labeled these—he was very happy to receive these. His face brightened up, and he was getting very talkative. [26]

[26] Dan Dryden, "Emery Blagdon Recollections," 1987, quoted in Leslie Umberger.

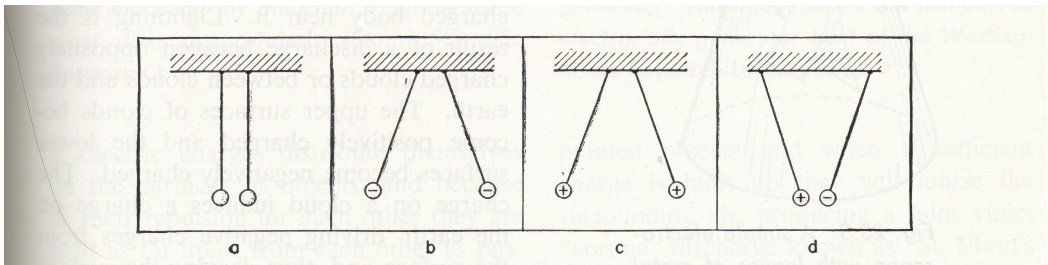

Fig. 23.1. Attraction and repulsion of charged bodies.

219 [27]

There Was a Girl Once

She lived on the neighboring farm, but her father didn't approve of Emery. His vagabonding. His sixty-mile-per-hour tractor. The way he loitered at the soda fountain and didn't work that much. The man didn't know responsibility, and besides, the way the children liked him—wasn't it a little creepy? But they liked him for fixing their bikes, for asking them questions, for catching lightning bugs with them, in jars, and after they fell asleep beside that lantern of bugs, Emery always let the bugs out. When they woke, the jar was open and empty. The bugs were off sleeping, or doing whatever it is that lightning bugs do during the day when their lights don't shine against the darkness.

Ethel Describes the Healing Machine

He invited her into the machine, of course. *Nothing doing,* she said. *I didn't want to go in there. It was a lot of wires and stuff.*[28]

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[27] From *Matter and Energy*, Arthur Talbot Bawden, Henry Holt and Company, New York, 1957.

[28] Ethel Blagdon Sivits, Interview by Don Christiansen, October 1990, quoted in Leslie Umberger, but sonically adjusted here.

Itinerant Is a Hard Word

Metallic and knocking. It is often applied to traveling preachers, but means, more generally, moveable. One who roams. Does the wanderer have a home somewhere? Some place that holds him? That he thinks of when he is away? Is he always trying to return, or is he trying to escape? He is always longing for another place.

Try *vagabond.* Why does he leave? Over and over, he is always leaving. Does he lose track of himself, leaving a fragment in each place--an eyelash in Nashville, a tooth on the boxcar, his gullibility in San Francisco? Or is he overwhelmed by the places he takes with him? Such heavy baggage: the green ocean wave, the beckoning limbs of the Joshua tree, the pale child offering her glass of lemonade, the bed with cool white sheets, the gray morning light and a pillowcase printed with yellow roses that smelled of another's hair? Is his body his only home?

Try *nomad.* Is the firmest self the one independent of opinions? Free from conversations that thread years? From the expectations of other people? Is the firmest self the one that washes away? The one who says: *There is no self*?

Try *hobo.* He collected places like Easter eggs.

On the Quality of Light Surrounding the Average Machine

Cold. Mechanical. Inhuman and, possibly, inhumane. Think *robot*, for example, and likely you think silver, cold-toned. But The Healing Machine was copper and gold and bronze and—yes—silver, too. Glinting. The wood was old and streaked and maybe half rotted. Paint, wood, warm-toned metals, the yellowy twinkle of Christmas lights, the wax paper like layers of skin, like a well-peeled sunburn.

(But what about the cotton gin? What about the printing press? Those are machines and they are not cold-toned or metallic. What about the way you want to eat the letter press stamps, or more, to press them to your skin, wear an "R" in Garamond on the soft inside of your wrist, an "E" in Palatino Linotype on your cheek?)

What the City Said

He refused to cut his hair and paid little attention to what he wore. He looked like a scary old vagrant. Now he can be seen as a great rural American shaman.[29]

Other Machines: The Modified Snooperscope[30]

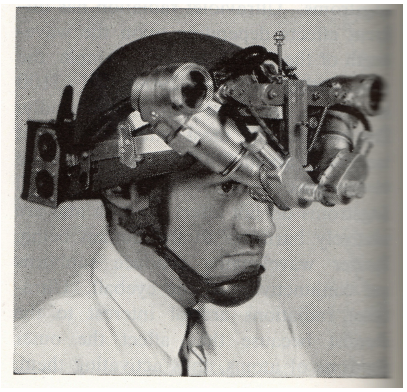

Fig. 31.2. A modified version of the snooperscope tube to give binocular vision for night driving. It runs off of the vehicle's power system. (Radio Corporation of America.)

He Picked Up Odd Jobs

The sawmill and the lumberyard smelled of sawdust and sometimes a little like burning wood from the friction between buzzing blade and board. A little oil kept things turning smoothly and occasionally smelled like popcorn. Emery wondered aloud: *is sap*

[29] Ken Johnson, "Emery Blagdon: Flights of Fancy from the Artist as Medicine Man." *The New York Times.* January 10. 2008.
[30] From *Matter and Energy*, Arthur Talbot Bawden. Henry Holt and Company, New York. 1957.

tree blood? Sawdust collected around his nostrils. He blew opaque white snot onto his handkerchief, stuck it back in his pocket. He wore gloves but the splinters dug into his flesh anyway, festering, pink and swollen, blotching his forearms and the skin between fingers. Tweezers were useless. Edna squinted through a pair of reading glasses and pushed at them with a needle. Emery squeezed his eyes shut. *If a tree could grow from a sliver*, he thought. If a tree could grow from his arm it would be worth it. A tender-rooted sapling ready for transplant. A new solution of sap-blood in his veins.

Baling hay was no better. Still the scratches on his arms. The grass was named timothy. The hot dust in his eyes. The men whistling and opening lunch pails. He whistled, too, looping and low. Windmills cut the sky with their bony limbs. Their flayed fingers sliced and gathered wind. And down in the dirt the waterpumps nodded. Prayed to mud and grass and spit their bounty into ladles, into pails and troughs. For lunch he had two chicken wings and a leg and a wide slice of rhubarb pie.

On Hair and Other Inanimates

Hair was dead, of course, and brainless, but he feared for it nonetheless. That the snip would hurt it. All that energy that would escape from the cut, invisible, but gushing like blood from a wound, electricity from a live wire. Feared that *things* had feelings.

He considered the sensitivity of a piece of pie, the crust separated from itself, the juices running. Of the broken shoelace, gray and fraying, marked by the black rings of metal eyelets. Of a page no longer blank, its surface scratched by a pen running dry, the marks accumulating, pressing faintly through to the other side. The communion between the wire and his swollen joints. In everything a sensate buzz.

The human body walked through the world like a spindle, the invisible energy winding upon it, tighter and tighter. Like the sputtering fuse on a stick of dynamite. To feel oneself as the spindle, or as the circuit between aquifer and sky. To live in the space between catgut and fret, absorbing the vibrations. This was the purpose of The Healing Machine. To shake loose the pain, to carry it to the next thing, to release it, but also to be the knot, the fuse, the loosened gnarl.

Miles and Miles of Nothing

There was the house, faded gray in the yellow grass. There were the cornfields. In the dark, crickets. In the day, cicadas and rustling. The front steps were flanked by two overgrown junipers. Musk thistle and small, twisted sunflowers tangled along the walk. An eastern red cedar half blocked the steps. *Emery,* Edna said. *Your house looks abandoned.* Anyone who mattered would know to go around back, he said. Or knock on the door of The Healing Machine. And they did. They knocked. They waited.

Afternoons in summer the sky turned green. Tornadoes. Hail. But when the lightning storms blew through most nights in July, Emery watched the strikes roll across the hills, marching toward him, forking and flashing. He felt them in his hair, in his fingers, in the copper bracelets around his wrist. The buzzing heat in his throat and in his knuckles. The crickets and bats fell silent. The cattle pressed against the barbed wire and lowed. Their coarse hides prickling. They bellowed and the rain fell on them. A loose board banged somewhere out back. The curtains snapped but he never bothered to close the windows. He liked the puddles under his feet in the morning.

Photograph #5

A newspaper photo. Blurry and cropped to a portrait. A laughing cloud of beard fills the dark frame. Pixelated wrinkles. And his eyes—where, in the other photographs you see the spark—are lost. Is he wearing glasses? Over and over, the accompanying article calls him "The Old Farmer."

The Body Is Not Like a Photograph

Simplified, the aura of a work of art is that clingy trace of the maker, the nonmechanical quality, like a halo, the smudge of human-ness. We can print photograph after photograph and they will look identical. The body is a closed system of one-way roads. Every penis exactly the same when it comes down to the two tiny veins, pinched off when the arteries rush. But the small intestine, framed by the orderly large intestine, loops everywhich way, a different bouquet in every body, a haphazard mess of ruffles. The small intestine is unique in its heaping.

Machines that read the output and rhythms and shorted circuits of the body: The X-Ray. The ultrasound. The blobs of color on a nuclear image, marking the place where the blood slows and gathers, indicating the clogged artery at the entry to the heart. The seismic blips of the EKG.

Emery avoided doctors. Did he feel the tumors gathering within him? Like cumulous clouds, all billow and rise? Did his arthritis go into remission, his body distracted, producing something new? Each day, he pressed his cheek to the painted boards of The Healing Machine. Each day, standing perfectly still, feeling the twinge and the currents.

Consideration: Healing

1. Skin knits itself together and scabs over.
2. The scab falls off, leaving behind a purplish spot.
3. Scars are also called *cicatrices*.
4. We opt for the easy term which is less beautiful and more closely resembles its sign. “Scar” slices and steams when spoken.
5. The body heals around shrapnel when necessary.
6. The heart reroutes the blood if the usual route is defective. Say you were born without a particular artery. If you are lucky the lub-dub will go on. The body improvising.
7. It is the overproduction of collagen that leaves a scar.
8. Smear it with vitamin E.
9. After gastric bypass, the skin remains six sizes too large, draped over the shoulders, dewlapping the triceps, skirting the body.
10. You want to heal, but to heal means to incorporate the shrapnel, to minimize the overproduction of collagen.
11. Who wouldn’t want to feel the vibrations, the electrical currents?
12. A suture, too, leaves a scar.
13. A band-aid is a plastic suture. You get to peel it off. The sticky black outline of lint stuck to glue is not a scar because it washes off.
14. Cauterization. Amputation. These, too, “heal.”

The Maker Is Not Clumsy

Emery hammered at a piece of tin, denting it flat. He punched a couple of holes in the corners and stuck a bit of wire through. He changed his mind, pulled the wire out. The holes remained. He looked up at Edna who was standing in the doorway. "Dinner," she said. "If you want it." She was holding a plate with a pile of greens and cooked carrots and meat. He stood up and wiped his hands on his pockets. He took the plate from her. He said, "Crumpled tin will never look new again, no matter how you press it and smooth it."

The Pharmacist on the Healing Machine

It depends upon what you mean by healing powers. If you mean is there an emotional, psychological impact that can affect your outlook, I would say yes, it definitely has powers of some kind. [31]

Who Is Healed?

The maker? The looker? The writer? The one who stands absolutely-one-hundred-percent motionless on the painted, salt smeared panel? Right here: under these dangling wires. Under this chandelier of painted baby food jars and plastic beads and copper coils. Right here: where the energy fields converge.

Emery hopping in excitement: *Stand here,* he said. *Do you feel it?*

[31] Dan Dryden quoted in Joe Duggan. "The Healing Machines of Nebraska." *Lincoln Journal Star.* January 7, 2006.

Other Machines: The Scent Distiller

A small copper pot—about two inches round—that collects an air sample, then distills and concentrates the scent of that parcel of air. These scent molecules are compressed into a tiny block, like a bouillon cube, and vacuum-sealed. To regenerate, add water and simmer over low heat.

Air Scent Sample distilled in Salt Lake City, Utah at 1001 E South Temple on November 21, 2010: Salt, algae, sulfur, car exhaust, coal dust, copper, copper bi-products (mostly alkaline soil), leaf meal, cut grass, soiled kitty litter, singed hair, cooked pork, spearmint chewing gum, lavender, sweaty gym socks, coffee, rubber of a bicycle tire, bicycle chain lubricant, Simple Green biodegradable cleanser, cedar soap, dirty wool (how long will you leave that pile of clothing before taking it to the cleaners?).

Air Scent Sample distilled in Callaway, Nebraska at the corner of Third and Main on July 13, 2011: Crane excrement, Sunflower pollen, corn pollen, nitrate fertilizer, Roundup Ready, diesel, popcorn, car exhaust, paper pulp, cattail, burnt matches, asphalt, wet concrete, sweaty gym socks, coconut sunscreen, pine sap, tarpaper, varnish, apple pie potpourri, paraffin, honey baked ham.

A Riddle Is a Conundrum or Enigma

By the time Emery died, his body was riddled with tumors. The doctors guessed they had been growing for ten years. That grain of sand in the oyster, growing precious. Then a rhizome with running roots spidering the soil. A potato with so many eyes. The

doctors had not seen him in town. Not at the clinic. His only medicine had been The Healing Machine.

The Pharmacist, Driving

The high school class reunion was in North Platte, twenty miles west. Dan and his high school friend Don sped along I-80, the fenceposts stuttering past like a film. Dan's hands at ten and two.

It had been years, Dan said. What--six or eight? Since he had given Emery the elements and then, curious, driven out to the hills to check out The Healing Machine. That way somewhere. (He took a hand from the wheel, gestured at the hills). Maybe ten miles north. Just this totally unassuming shack. You'd never know from looking at it.

The interstate cut a corridor between the hills.

We should stop, said Don. You've been telling me about this kook and his magic salts for years. The G and Ts will wait.

Yeah? You want to? Dan said.

There was no one at the farm. The hem of a kitchen curtain was pinched in the window sash, flipping in the wind. They walked up to the porch. A bill was posted on the door.

Emery Blagdon had died. The estate would be auctioned. The woodstove. The windmill. Lots of fancy wire work. Some painted boards. Some Jars. Homemade toys. Pie tins. Paints. The list was long—the Healing Machine would be sold piecemeal. More than four hundred individual components.

The Gavel and the Auctioneer

Each shining jar of salt held like a scope against the sky.

Andwe'vegotsomemorewires.What'llyougiveforthesewires.CanIgetfifteen?Fifteen
.Seven
teen.Seventeen.Twenty.Twenty.Twentyfive.AndTwentyfive.Thirty.Thirty?Thirty.CanIget
thirty
one?Goingonceatthirty.Twice.Soldforrthirty.Andwe'vegotanotherboxofjars.

Dan Dryden and his friend Don Christensen purchased the Emery Blagdon works at the sale of his estate in 1986. They bought all 400 pieces. The shed was torn down.

Photograph #6

A man and woman, wearing green latex gloves, tinker with a piece of The Healing Machine balanced on a table. Flourescent light and gray industrial carpet. They bend their heads. They wield brushes and tweezers. They breathe mint and wear aprons. They do not look up for the photograph.

Source Note: Throughout the entirety of this piece I have quoted, stolen from, and mercilessly appropriated words and information from Leslie Umberger's essay, "Emery Blagdon: Properly Channeled." *Sublime Spaces and Visionary Worlds: Built Environments of Vernacular Artists (*Princeton Architectural Press. New York: 2007). I credit her with most of the information found here and with none of the inventions, fabrications, mistakes, misquotes, or careless imaginings. I am an unreliable source, making various assumptions and projections. You can put these pages down but the words will still be here, the ants parading. My voice, their voices, stored in ink or electricity. I am no scientist. I am barely responsible enough to pay my cell phone bill on time.

III. BLOOD AND MILK: STORIES

1.

East-Central Africa

1935

Our route took us through the Red Sea and down the Indian Ocean to enter the African continent at Mombasa below the equator and then across Kenya and Uganda into Eastern Belgian Congo, and thence about 4000 miles down the long stretch of the Nile through Sudan to the modernized civilization of Egypt.

Weston Price, DDS, *Nutrition and Physical Degeneration*

TYPES OF PARASITES WE WERE WARNED ABOUT

Anapheles Mosquito: From the Greek for "Good for nothing." Useless. Bearer of malaria. Stick figures with wings and that long tender proboscis, barely a hair, but it punctures the skin. Saliva goes out, blood goes in: swelling, itching, fever, delirium. Their transparent bellies fill like oil lamps, but with blood meal. They are swollen with their transparent jewels of blood. The angle of her body at rest is steeper than that of other mosquitoes. The angle of her body biting is a broken plank.

Note: Other types of mosquitoes cause yellow fever, dengue fever, elephantiasis.

Prevention/Treatment: Daily dose of Quinine. Smoke from campfires and cooking. Castor oil in the lamp. Eucalyptus oil. Birch and tar oil. Citronella. Pyrethrum powder, incense, long sleeves, basil oil, and bed nets. We run our fingers through our hair, through each other's hair. We check each other for the fat crawling bodies of ticks. We shake our clothes out, shake the bedding, smash anything that moves.

That first night with the Massai, Florence and Weston lay awake listening to the sounds of lions attacking a herd of zebras. More than the snarling of the lions, who didn't roar—they didn't have to—it was the zebras that kept them up. The zebras screaming, making sounds they were not meant to make. Sounds that seemed forced out of them, shapeless and chaotic. Twisting wails and groans and gurgles.

In the morning, Florence stepped out of their tent into sunlight that fell flat and golden across the village, stretching long shadows across the plain. She watched four men leave the village first—before the cows or the boys or the women who would walk for water—holding their spears at the ready, checking for ambush, but completely unafraid.

At lunch, Florence watched three men bleed a cow by plunging a lance-tipped arrow into its neck. The cow was on the ground, its back and front legs bound, a band cinched around its throat. One man held the cow's horns to steady its head. Another smoothed a hand across the beast's neck as if to calm it, while a third drew an arrow back just slightly, and shot the beast at close range. They collected the blood in a gourd while the guide explained that they would defibrinate it by cooking it briefly, and then mix it with milk and drink it. The men staunched the wound in the beast's neck with ash and the blood stopped immediately. They unbound her legs and the cow lifted her head and returned to grazing as if she had just awoken from a nap.

Everywhere Florence and Weston went, they slept beneath a mosquito net. They never let their bare feet touch the ground for fear of jiggers that would burrow into the soles of their feet to breed. They pulled their socks high and kept their shoes tightly

laced. Mosquitoes hovered beneath the tables in the eating hall, seeking tender spots at the backs of their knees, an exposed ankle, a hand resting on a lap. So Weston and Florence took meals in their tent, the lamp burning bright with the foul smell of castor oil. They kept the lamp lit even while they slept.

They had been traveling for three years. Still, Weston wanted Peru, the Torres Straight Islands, New Zealand. He wanted the Australian Outback, the Amazon. Florence had not yet told him that she was tired.

Dinner was fried beef and brown beans and unleavened bread. They chased the beans around their plates with forks and Florence understood why the people used their bread to eat, instead of forks and knives. It was practical with this food, and she wanted to put down her fork, or fling it off into the bush. She would scoop the beans with the sour, spongy bread, but she did not. She stabbed a tough piece of beef, began to chew.

*

Guinea Worm: Dracunculiasis, little dragons. The larvae of the worm are eaten by water fleas that swim within you if you drink the wrong water. In your intestine they grow and mate. The male worm dies, but the female, pregnant, navigates the highway of your bones, following the force of gravity, plotting the course of your hips, your femur, your shin bones, until she forces her way out through the skin of your calf, your ankle, your foot. She is as thick, sometimes, as a strand of spaghetti.

Prevention/Treatment: Don't drink stagnant water, and filter every drop anyway. If you are inhabited by a worm, you will feel her twisting her way down the course of your body. When the worm burrows her way out through your skin (the end of a yearlong journey), don't plunge your burning foot into a river or lake to extinguish the fire (in water, she will spray the eggs that will be eaten by the water flea and begin the cycle anew). Instead, coax her onto a small stick. Wind her slowly, day after day, into a little skein; the stick is your turnkey. Keep her out of the water. Wait out the misery until your body, again, belongs to you.

By the time they reached Kenya, Florence had put her fingers in the mouths of countless children. All over the world, she had put her fingers into the mouths of children and pulled their lips back to reveal their teeth. Sometimes, their teeth were slimy, even tinged with green, as if covered in a thin layer of algae. In every village or city, she pulled their lips back at the corners and put her fingers in, four at a time. By the time they reached the Wakamba, the Jalou, the Muhima, she knew that mouths, and children, were strong.

In the photographs, the children often appeared to be jeering. Sometimes their heads were tilted upwards, their eyes closed, as if they were praying. They looked transcendent. They looked like the sculpture of St. Teresa Florence had seen in Rome—white marble robes writhing about her, her eyes closed and her mouth open, an angel held an arrow at her heart, but it seemed the angel had already stabbed her.

Other times, the children looked complicit and proud, their dark eyes glinting. She felt their heads press against her, their narrow shoulders against her hips, their hot slick mouths. She stretched their lips wide and waited. The shutter opened and closed. She watched it: a black eye unfolding and refolding. Only her hands were ever included in the photo. Sometimes a scrap of her dress made a faded floral backdrop, but she was always cropped from the frame. There were only her disembodied hands in the child's mouth.

Florence washed her hands while Weston set up his camera. The interpreter translated for the child's father. *Go ahead*, the father said. He nodded. *Do what you wish.* He said something to the child, who was Florence's height, ten years old, the father said. His eyes looked sleepy.

Florence stood behind the child while Weston pulled the dark cloth over his head, scooted the tripod a little closer and focused the lens. She touched the boy's shoulder. "Okay?" He turned toward her, then back to the camera, but said nothing. She reached around his body, her arms resting lightly on his shoulders, and put her fingers to his mouth. He did not help her. He did not smile.

"Please ask him to smile," Florence said to the interpreter. She pulled his lips wide with her thumbs and forefingers, felt his slick gums, the hard teeth beneath them. She waited for him to grin, but instead, he snapped at her.

A swift bite, and he caught the tip of her thumb between his teeth, biting thumbnail and flesh.

She yelled and pulled her hands away. It was her left thumb and she shook it as if to fling the pain from her fingertips. She studied it, turning her thumb over to see the place where the skin was broken, where she saw the smallest trickle of blood, almost nothing. The child blinked at her, calmly.

"Why did you do that?" she asked, squeezing her thumb with the other hand, trying to make it bleed more, trying to make the pain stop. The translator stepped back. He said nothing. No one said anything. Even as the pain faded Florence wanted to slap the child, but the father hooked the boy's neck in the crook of his arm and pulled him away, back toward the huts, and still no one spoke.

She took comfort in the fact that the boy's mouth would be filled with the metallic flavor of blood, but then, she had watched the Masai mix blood into milk and drink it. She did not know what the Muhima ate, but it was unlikely that her blood tasted any different from that of a steer. He had hurt her, the white woman who did not know

how to speak to them. She never knew what they thought of her—not here, not in any of the places they had visited. In each place, she watched the people and they watched back. And sometimes they smiled for the camera and she touched their shoulders, their mouths, their teeth. Sometimes she felt their bodies against her own and she breathed, as they held still for the camera and they smiled. But now she had been bitten.

She knew the child did not have rabies, but Weston insisted on a series of shots anyway. *A precaution*, he said. Rabies, tetanus, diphtheria. For six days she could not lift her arm, so bruised was the muscle from the tetanus injection. The shot for rabies was in the stomach, and there would be two more, at intervals. It itched and gave her a headache.

Weston had pressed the shutter exactly as the boy's teeth clamped down on her thumb, and a week later, when he developed the negative, Florence studied the concentration on the boy's face. How careful he had been. How deliberate and swift. She thought she could see that he hated her. But then, maybe it was research. *Blood: red and tastes like metal.*

And so Weston had the children use their own fingers to pull back their lips, but the kids were clumsy, often only pulling their lips back partway, or lopsidedly, or they let them go before he had taken the photograph and the whole process had to be repeated. The day after the bite, Florence stood behind Weston, watching a child through the ground glass of the camera, where he appeared upside down, but she was bored, and a little self-conscious, so she went off walking instead, following a trail through the tangle of dry plants that lead to the river.

Just before our arrival at the Pygmy village, two babies were carried off by a leopard.

Florence did not know how to ask: *how can you live this way*? She thought there must be a story about such children that made it—impossibly—a survivable grief? That the lost children would become leopard children, quick and sleek? That their spirits would roam the jungle, playing tricks on their abandoned parents. Or, she wondered, were such things so common that one did not grieve, but let the children go as one would let go of a chicken stolen by a fox? *A leopard with two babies in its jaws. Two human babies in its jaws.*

At their guide's bidding, Florence and Weston brought a gift of salt. It had taken a few days to find the tribe, to speak with the chief, who said yes, okay, you can come see us. Yes, we will show you our teeth and our food. Some of their homes were high in the trees.

They accepted the salt with a bow, and the visitors had earned a dance. First, the old women stepped out, all in a line, wearing short, full skirts made of grasses and fibers. Their small, angular bodies hunched, they took compact steps and shook their bottoms so the skirts rustled like tailfeathers. Their bodies were straight and masculine to Florence's eyes, but their long breasts swung in rhythm with their steps. Then came the hunters, moving in a line, the same creeping softstep, in the way they'd sneak up on an animal, ducking beneath the heavy jungle leaves, stepping silently, but for the rattling of leather or grass fringes around their ankles. Their song was a joyous call and response, a round of shouts with an echoing melody. They smiled while they danced, delighting, it seemed,

in the earth beneath their feet, in their precise limbs, and in their voices that met in the air between them.

The next day, two men leaned against the tremendous tusks of an elephant they had killed, and the evening was full of storytelling—they acted out the narrative, creeping along. How they had cornered the beast, circled it with snares. How it did not know they were there, eating leaves from high branches, swinging its trunk. How they hamstrung it. How they pulled it off its tremendous feet. How they sawed its trunk off and waited while it bled to death.

The salt Florence and Weston had given them would be used to enhance the flavor of the elephant meat, their favorite meal. It seemed to Florence a horrible way to kill a beast, so slow and vicious, castrating its noble trunk, its most distinguished limb, with which it had done everything—fed itself, bathed its young, lifted smaller, pesky beasts, trumpeted joy or fear or grief or anger. That night she thought the Pygmy were cruel, violent people, but in the morning, they danced before they ate, before they bathed, they danced greetings and farewells. It seemed they could not help but dance and the joy almost overshadowed the killing. She thought then that the killing of the elephants was their fatal flaw, the stitch God dropped from the tapestry to keep them imperfect—their Achilles heel. The scent of elephant meat on the fire turned her stomach. She would not taste it. She wanted to leave that dark clearing, which had become a place of slaughter.

*

In Ethiopia, the people ate a lot of fish. They had learned to fight underwater with spears, swimming beneath the boats of their enemies and scuttling them until the people fell overboard, where they were at a terrible disadvantage against the skilled swimmers.

By now, Weston had gathered stacks of photographs of people from all the places they had been. Of children and adults. Smiling. Pulling back their lips to show their teeth, perfect or imperfect. Of the boys from the school in Ohio jeering beneath the brims of their dirty caps. Of Alaskan children holding up fish nearly as tall as them. Of Hebrides islanders in front of thatched huts. Of Swiss children with their soft hair blowing, the hillsides behind them dotted with flowers. Of the Massai, towering gracefully over Weston, and of the Pygmy dwarfed by that pair of elephant tusks.

When Weston studied these photos, he remarked on the symmetry or asymmetry of jaws, on the spacing of nostrils, the broadness of foreheads. But when Florence looked at them she was often surprised: a pale girl with a gap between her front teeth, or with too-narrow shoulders, would strike her as lovely. Weston remarked on the genetic deviation evidenced by the heterochromatic eyes of a boy from the Ohio school, but Florence saw that the child looked enchanted. Weston said that beauty was health, symmetry, harmony with nature. But Florence thought it might be something ineffable, something fleeting. *A flickering ghost.*

She had read that it was once considered beautiful to be pale and fat. That a pale, lazy woman had been the pinnacle of beauty. A fat woman would have smooth, uncallused hands. She spent her days eating cake and cream off a silver tray, garnished with a sugar cube and an orange blossom. She smelled of flowers—not of alkaline fields or salt, not of sweat or sulfur—the smells of nature, of harmony with nature.

And even the orange blossom withers. On the ground, the soggy blossoms rot. Unplucked, the orange itself drops and is devoured by ants, or it is pushed along the dirt

by rats. It grows a beard of mildew, and beneath it the soil writhes with ants and maggots. The rotting orange feeds them, becomes them.

Weston said that if people—Americans, Canadians, *civilized* people—did not learn how to eat properly, the future would be full of degenerates. That all around them would be misshapen faces and rotten teeth and hearts that didn't beat a proper rhythm and blood that didn't clot. And this future would be full of pickpockets and racketeers. There would be no standard from which to measure the little chins and crowded teeth. People wouldn't even be able to complete a simple math problem.

But in the photos of the Ohio boys, among the crooked teeth and the lopsided jaws and the squashed nostrils, there was one of a boy laughing. Florence remembered him, how when he laughed, he became something entirely new. In motion, he became beautiful. Like the turtles she had seen in the Pacific. They were so awkward on land, dragging their heavy, legless bodies across the sand. Their prehistoric heads drooped on wrinkled necks. But when they reached the ocean, they slid into the water and became blades of sun. She leaned over the edge of the boat and saw them playing—doing barrel rolls and then drifting along, so slowly pivoting their strong fins. On land they were clumsy, but in the turquoise water they were perfect creatures.

*

Tse-tse Fly: Also called "Tik-tik." At rest, their wings fold and stack atop each other. The flies themselves are not parasitic, but they are vectors, carrying single-celled trypanosomes from person-to-person, horse-to-crocodile, person-to-horse, cow-to-person. Metronome tails swish them away, but still, they land. Still, they feed. Trypanosomes: single-celled, not simple. A half-full tse-tse, her meal interrupted, perhaps, by that swishing tail or a slapping hand, seeks the other half of her bloodmeal. Tse-tses want a meal the weight of their bodies. She inserts her proboscis to feed—mechanically, like a syringe—but she regurgitates a little of her last meal into the host. And the single-cells grow inside the tse-tse, travel with her, then grow again inside their new host—human, horse, cow, crocodile, lizard, camel, pig, or antelope. Trypanosomes live within the tse-tse and move from creature to creature, canny without thinking, they swim from the tissue to the lymphatic system. The swollen nodes are called Winterbottom's Sign, augury of nothing good, omen of death, the lumps swelling on the back of the neck. Then to the bloodstream and then to the brain.

Sleeping Sickness: 1. Fevers, itching, headaches, joint pains 2. Confusion, numbness, lack of coordination, trouble sleeping through night, but sleeping through the day.

Prevention: Wear long sleeves. Avoid rural places, especially those with outbreaks and livestock. Slaughter infected beasts.

Note: In Togo, mothers sprinkle dead tse-tse on sliced melon and feed it to their babies as a ceremonial prevention.

The land around the Nile was flat and open and the sun was a pink disc through the dust. In the mornings, Florence watched the men scrub their skin with dirt, coat themselves with it, and brush their teeth with ash from dung fires, tucking a bit of charcoal between their finger and their gums and rubbing. Always, there were the sounds of cattle bells and shuffling hooves, and she watched the tall thin figures of boys and men on the horizon, walking with their herds, silhouetted by the pink glow. Years later, when she thought of Sudan, she thought of those silhouettes, far out on the plain, the dust always rising, and a haze that made it seem she had dreamed it.

On their fourth day in the Nuer village, a boy died. Or rather, a man—twelve years old, but he received his marks a month earlier. John Rec Puk, their translator, explained to Florence that there was a ceremony in which a Nuer boy became a man. Along with the others in his age group, the boy laid on a grass mat. An elder leaned over him and cut six lines into his forehead with a triangular blade. The boy had to remain perfectly still or the jaggedness of his marks would bear testament to his weakness for the rest of his life.

The dead young man, his scars barely healed, had been bitten by a puff adder while filling the water jug out at the cattle camp. There would be a ceremony.

In the afternoon, Florence followed Rec to the hut where the boy was stretched on a mat, his arms folded across his chest. His ankle was swollen, but other than that he was slender, his skin perfectly smooth and a little bit shiny, the dust wiped clean. His eyes were closed and his forehead bore six perfectly straight, parallel scars.

Despite the scars, Florence couldn't think of him as a man. That petal-smooth skin. Those sharp elbows. A woman, presumably the child's mother, knelt beside him moaning. Florence recognized the word the woman said over and over: *Kwoth*—God.

Rec whispered to Florence, "As a boy, his name was Tears."

"Tears?" Florence repeated.

Rec nodded. "The children are named to trick God into ignoring them. A cheerful name will catch God's attention, but a mournful child, a weak or doomed child will not inspire God. That one there," he said, gesturing to a girl across the room, half hidden behind her mother's legs. "She is Death. And that one is You Will Not Live." He pointed to three children who were kicking a stone back and forth outside the hut. "You Will Die, Grave, and Weeping."

"To trick God?"

"To distract him. So that he will overlook them."

To distract Him, Florence wondered, or to acknowledge Him? You Will Die was, after all, the mark on every person. Like the smudge of ash the Catholics wore on their foreheads before Easter. Death was God's thumbprint. He would claim them all. The boy's mother rocked on her knees and pleaded, a string of words tumbling out, the sound of her voice rising and falling and rising again.

"What is she saying?" Florence asked. "Is she praying?"

"She is complaining. When her boy got his marks he also got a new name, and it was then that Kwoth noticed him. His presence was discovered."

"She wishes he remained a child?" Florence asked.

"No. It's better that he died a man. Now his family will remember him. When a child dies he is forgotten. It is as if he never belonged to the world."

Florence studied the boy's bony arms, bent at the elbows and folded lightly over his narrow chest. Rec led her out of the hut. He had to go, he said. He had business in the village, but he would return if she wanted to stay. So she sat down in the dirt to watch the children playing. She waited for something to happen.

In the evening, after Rec had returned, the father and the uncle cut the dead boy's liver from his body. They used the tips of their knives to lift the organ out of the boy's body, maneuvering their blades like surgeons, never touching the liver with their hands, never smearing blood across the boy's skin. They cut the liver into five pieces and placed one piece in a gourd that they hung on a pole for the birds. The family ate the other four pieces.

"The soul resides in the liver," said Rec. "It feeds on other livers. It is always hungry. We do not let the liver waste."

Her own son, her Donald, had been buried in Cleveland, though Florence knew he would have preferred a grave at Bon Echo, given the choice. He was buried under a pear tree in the Presbyterian cemetery, near Weston's Uncle Donald, his namesake, his grave marked by a small, stone angel. She had not been to his grave in years. She did not think of him lying in the cemetery anymore. It was only his body that was there, and not much of that would be left after twenty years. They had buried the body of their twelve-year-old boy.

Florence watched the dead child's mother slowly chew a bite of liver. The mother closed her eyes and raised her hands to the sky. Was it a comfort, Florence wondered, to consume your child's soul, to let his soul nourish your own?

*

Chigoe flea (Jigger): not to be confused with chiggers. The smallest of all fleas, tiny black pinpricks. The males, like other fleas, gorge themselves on a blood meal, then let go, fortified. But the females (always the females) burrow into the skin. Into the soft spots between toes. They embed themselves mouthfirst, leaving their back feet dangling in the air behind them and a tiny hole in their abdomens exposed. A miniscule new appendage, she attaches herself to the blood vessels and feeds continuously—swelling and swelling—until a callus forms around her. She is a blister, pregnant with eggs. A caldera her own volcano. When she is full, she drops her eggs out the abdominal hole and dies, sloughed from her host's body, discarded along with dead skin cells, but not until she has caused terrible itching and burning.

Prevention/Treatment: Lace your boots up tight. Pull your socks high.

Despite her efforts to prevent them, jiggers tunneled their way into Florence's left foot. The weal was two inches around, puffy and pink and she could not stop scratching. Sitting on the edge of the bed, she smothered her foot with calamine and wrapped it tightly in gauze so she could not scratch at it. She trimmed her fingernails to the quick.

Weston had told her once that Ancient Egyptians thought a decayed tooth housed a worm. To cure a toothache one only had to dig out the invader, the blind, white toothworm. "We know now," he said, "that the worm is the root of the tooth, and with it comes the nerve. It must have been horrendously painful to have a worm removed."

A root canal is not particularly complicated: you dig the channel. You drain the decay. You fill the hole. But in their child's mouth, their Donald's mouth, the hole filled with spirochetes and staphylococci, microscopic travelers that swam through the new portal, invisibly writhing daggers and corkscrews. From there, the path to his heart was short, and the heart is easily susceptible to such poisons.

Their house in Cleveland always smelled of lemon furniture oil. Leafy sunlight patterned the walls. The windows slumped in the frames, thick and warped. The day after Donald died, she stood in the living room, looking out the blurry window, watching neighbor's child push a toy truck over the cracks of the sidewalk. She had so often looked out that window, drying her hands, straightening her hair, leaning against the doorframe while Donald played on the rug, his curly head bent over some project or other.

After Donald died, Weston put all his tools in the soup pot and boiled them until the water was gone and the house smelled of vinegar. Toothbrushes, scrapers and picks,

drill tips and scalpels. But then he flung the lot of them at the fire anyway. He watched for a while as the flames blackened them.

"They won't burn," Florence said uselessly. She remembered saying it, the flat tone of her voice, and how Weston had left the house without his coat. How he let the door slam, stayed gone for hours.

The next day she cleaned the fireplace, raking up the blackened tools with the ashes and coals. She held a set of charred pliers in her hands. She opened the grips as wide as she could, pulling them apart, tying to break them or at least bend them. She took each tool from the ashes and laid them in a row. They were only metal. Lifeless, blackened tools. Unbreakable. She dumped them with the ashes into the rubbish bin.

She grew to hate that house with its shining, creaking floors and empty rug. And their house at Bon Echo was worse—the echo seemed, at last, to have fallen silent. There was nowhere for them to go that was not haunted, but no place was haunted in the way she would have expected. There were no animated ghosts. A ghost would have been a comfort, the glimmering presence of her child, some light or warmth. Even a slammed door would have been a balm. But instead, every place was empty.

How she wanted to put out the lamp for once! It seemed her foot would itch less in the dark, like the itching would be extinguished, blanketed in cold darkness. She wanted to lay in the dark and put her hand on Weston's chest and feel his lungs filling and falling. "Couldn't we just turn the lamp out for a few minutes?" she said.

"You know we can't," Weston said. "The mosquitoes."

"I don't care," she said. "I just don't care. And we'll be under the net anyway. It's been so long since I've seen plain darkness. I'm tired of sleeping next to the lamp. My eyes burn even when I'm sleeping. I dream my eyes are on fire."

"Okay," he said. "Okay. But only for a minute." He turned the wick down, and the room was dark, and she put her hand on his chest and felt him breathing. She stared into the darkness, which looked like breath. Black-blue and cool, it washed her eyes and she looked at it, felt the blackness of it, the quiet of it, the fullness.

They would leave the village soon, by boat, the day after tomorrow, maybe, scooting along the surface of the river in a canoe, between the dry banks. The cattle would raise their heads, their long crooked horns pointing at them, and pointing at the sky. The people would sing some song about their leaving, about others who had left, or they would make up a new one. And their guide would sing, too, about the river, about leaving. And later, from an aeroplane, she would see the huts below her, imperfectly round, their roofs flattened by perspective, and she would see the Nile as mercury between the banks. The people she had met here—Rec, the canoe guide, the child that had bitten her—would all look up to watch the aeroplane fly over, and she would be in it, flying away to a world where there was electricity and money and markets full of fruit and God—a single God. A world where one slept night after night in cool, quiet darkness. Where one took darkness for granted and where the only harm caused by a mosquito was a small itchy pink bump that quickly disappeared.

Weston coughed and she felt it rattle in his chest.

"When I was a boy," Weston said, "I had this dog. Jasper. He was a mutt, mostly shepherd, and smart, and I trained him to do all sorts of tricks. My mother hated it. 'Why

are you spending your time training a dog to roll over when you have chores to do?' she would ask. She was right—I had a lot of chores and I had school, but that dog was my indulgence. I loved him."

Florence pictured the young Weston, before they met, before he'd had Typhoid fever and lost his teeth and gotten his perfect dentures, before he had gone away to school in Michigan, back when he was a skinny little farm boy in overalls. Beneath her hand, beneath his skin, tucked neatly into ribcage, his heart was beating its steady beat.

"I always took Jasper a scrap after dinner—some gristle or a crust or whatever was left on the table—and I would toss it for him and he would jump and catch it in midair, and gulp it down without even chewing. I could throw him a scrap from ten meters away, as high as I could toss it, and he would catch it every time.

"I thought it would be funny if I threw him a piece of pickle—you know—if I threw him something bad? I don't know why. Because I wanted to see how far I could take his trust? Or, despite my love for him, I thought that he was ultimately stupid. That he was just a dog. I don't know, but I threw him a vinegar soaked pickle, and he caught it, of course, and he started coughing and pawing at the ground and rolling around. But the next day he was ready to catch whatever scrap I'd brought for him. He just stood there, wagging his tail."

He patted her hand.

"What happened to him?" she said, finally.

"Well, nothing much, I suppose," Weston said. "That's all, really. I never did it again. I went on loving him. He went on catching whatever I threw. Eventually he died, like all our farm dogs… We should light the lamp," he said, but he didn't move.

Florence's eyes had adjusted to the darkness. She could see the wardrobe across the room from their bed, a darker shape on the dark.

They had seen the ways that people lived and ate in seventeen countries, in the bush and in the towns. She had been bitten by hundreds of insects. She had been bitten by a child. She had watched a father cut his boy's body open and remove his liver, and she had watched the boy's family eat the liver. Once, she had loved a child of her own.

It had been thirty-one years since they built the inn at Bon Echo. They had not been there since the summer after Donald died, since they sold the inn, although they had kept a small cabin for themselves. She had not seen the lake for twenty years. She wanted to see it now. To sit by the fireplace in the cabin on a long, black night while the snow swirled and stacked in the windowframes and on the surface of the frozen lake and the firelight flickered on the walls and her feet touched the braided rug in the middle of the room. A sealskin parka would hang on its hook by the door. Woodsmoke would permeate her skin and hair. In the tiny kitchen, she could make tea. She would unscrew the top on a jar of blueberries, picked in the summer and stored for just this night in the middle of winter.

2.

Lake Mazinaw, Ontario

1914

THE LEOPARD FROG

Amphibian is a word from the Greek *amphibios:* both kinds of life, double life. Living both in water and on land, a frog is equal parts swimmer and hopper. It breathes in air and in water. It has nostrils and lungs strikingly similar to those of a human, but it also breathes through its skin, osmotically exchanging carbon dioxide for oxygen.

At the lake, frogs sang every night. During afternoons, they were quiet because they were submerged or swimming, keeping cool in water or mud. But at night, their voices were our chorus; the slow creaks overlapping each other like ripples on water. A single bass voice emerging from the masses and then submerging again, emerging and submerging. I walked with Donald to the edge of the lake, his small hand clammy in mine. We sat on the pier, and listened to the rusty hinges of frogs' songs.

A child that dies young is a perfect child, uncompromised by his inevitable mistakes. He hasn't hurt anyone yet. Not seriously. Not wittingly. The wounds inflicted by a child are forgivable accidents of judgment. He doesn't know better. Time bleaches his selfishness. His failures fade to quiet bones. Memory sculpts his recessed chin to perfection, muffles his tantrums to sleepy kicks and tangled hair, polishes his flushed cheeks to a July-ripe, sun-warmed peach. Woken from a nap, Donald always smelled like hot sugar.

A frog's eyes are situated on the sides of its head. They have excellent peripheral vision. To catch a frog you must grab it firmly from behind. Close your hand over its bulging lungs, its folded legs. Feel its slick, cool skin, coated in mucus. Let its nose and eyes stick out the front of your fist, between your index finger and your thumb, so it can breathe, so it can see. Hold tight. Feel its lungs strain, its heart beat faster.

When Donald was angry, he narrowed his eyes, and I would laugh at him. "I'm serious," he would say. "It's not funny." His father never laughed, but I couldn't help it. When he was studying something, peering through his magnifying glass or reading a book, his eyes were placid and wide, almost vacant. When he slept, I watched his eyelids twitch. I imagined the world of fish and flora through which he was swimming. An exhibit of chicken eggs, arranged from smallest to largest, speckled and plain, white and gray and brown and green. A treehouse full of books and animals, praying mantises and squirrels and the dog we had refused him.

Donald loved the sounds of chickens, their arrhythmic squawks and chortles, their grunts and burps. He imitated them at the breakfast table, gulped his orange juice, wiped the juice from his upper lip with the back of his hand, then went out to collect the day's eggs. He spoke to the hens, *Good morning ladies. I trust you slept well. Madeline, you dreamed of a handsome rooster, yes?* He came in smelling of alfalfa, the top of his head hot with sunshine. When he was six or so, I took him to an aviary in Cleveland. We met a peacock with royal blue feathers and a delicate curling crest on the top of its head. It hooted at us, a bursting, excited noise like a party horn. He named it Betty although I

pointed out that it was male. *But he's so pretty*, Donald said, *and Betty is my favorite name.*

If you open your hand and let it sit on your flat palm it will jump. You can hold it by the legs, by the ankles, like the tiger toe in ini-mini-myni-moe, and it will stretch from your hand and swim through air.

Weston always said that it was a boy's job to learn the lessons of the natural world. If he is lucky enough to have both the time and the mind for studying, he had best be serious about it. And Donald has made it his business to study echoes every time he stepped onto the porch. He cupped his hands around his mouth and shouted across the lake to the cliff. "Yooooo-hoo! Bonjour, Echo! Bonjour, Mama! Bonjour, Emileeee!" The echo never failed, a playful ghost sending his words back to him.

You will need:

- One medium- to large-sized frog (a small frog will make your cutting and parsing tasks more difficult. Viscera are more easily discerned in a larger specimen, and there is more room to navigate your scalpel. *Rana Pipiens*, the leopard frog, is a fairly large species (5-7 inch torso), and they are plentiful in the Northern U.S. and southern Canada)
- 15-20 pins
- A scalpel or small, delicate scissors
- A probe or fine-tipped awl

- Tweezers
- A dissection tray (a true dissection tray is coated with a bed of wax so that you can insert the pins. A corkboard will also work, but it will not be as easily washed clean after the dissection.)

There was a girl at the lake his last summer. 11 years old, the same age as Donald. Emily taught him the difference between deciduous and coniferous trees. *Decidous* was the word Weston used to describe Donald's baby teeth, what others call "milk teeth," the little pearls a child trades with the tooth fairy for a quarter. Donald wanted to know if leaves were like teeth, if they were replaced by bigger, stronger leaves the next year. We looked the word up—it means "fall." And so he thought of teeth as leaves, molting and drifting. And I thought of children's teeth as more delicate than I had before, something like fish scales.

On the porch, Donald and Emily ate sandwiches I made for them. They argued about which was the more beautiful flower, trillium or lady slipper.

"Mom, what do you think?" Donald asked, looking for a tie-breaker. I agreed with Emily: the three drooping white petals of the trillium are the loveliest of that forest. They are humble flowers. The puffy yellow lady slipper has always looked carnivorous to me, as do all orchids, with their thick petals and heavy heads, their stamens extruding like sickly fangs. The lady slipper droops like a blister, like the distended throat of a bullfrog. It look swollen and poisonous, like a goiter.

Rana Pipiens: Leopard Frog. Inspect its circular brown spots, green belly, pale throat. Four toes on its forelimbs and five on its hindlimbs. Let it go. Watch it swim deeper through the water until it disappears.

Donald had a science book full of diagrams and instructions for experiments. He and Emily smeared their fingertips with petroleum jelly and pressed them to the side of a jar, then dusted them with flour to study their prints. I helped them make pink dye from beet juice and they dyed old white pillowcases. Donald cut his into two heart-shaped pieces and sewed them clumsily together. I showed him how to turn the heart inside-out, stuff it with cotton, and close the final seam.

Chloroform is the best way to kill a frog for dissection because it leaves the body soft, the skin, skeleton, and skull intact. The frog dies painlessly, as if falling into a deep and gentle sleep. It is, however, difficult to measure a dose of chloroform; the gas is dangerously imprecise.

That day, we killed the frog, instead of watching it swim. That day, Donald dampened a cottonball with chloroform and dropped it into the jar. Screwed the lid tight. I didn't watch, but Donald and Emily did, on either side of the jar, eyes wide and unblinking.

When captured, the leopard frog sometimes lets out a shrill, scream-like sound.

A few feeble kicks. A half-hearted attempt to scale the steep sides of the jar, its toes spread wide, it slides back to the bottom of the jar. Like a small rock, it sleeps.

Is the frog male or female? A frog's sex organs, either testes or ovaries, are bean shaped and situated near the kidneys, deep within the frog's torso, nestled under loops of intestines. While a frog's body shares many anatomical traits with a human body, the sex organs are distinctly different. Frog eggs travel a winding, threadlike tube through the female's body and she releases them into the water. A pond becomes the womb, the site of fertilization and growth, keeping the eggs wet and floating. An egg morphs into a tadpole. First, the egg grows a tail, then tiny legs and eyes and organs. The creature begins its double life, breathing both on land and in water, living between worlds.

Dorsal side: spotted. Brown on dark green.

Ventral side: smooth. Very pale green. Solid colored.

9.5 cm from nostrils to cloaca.

(Cloaca: a small slit opening in the anterior of the frog through which waste, sperm, or eggs leave the body.)

The diagram showed the places he should cut: a long slice from throat to crotch, and two perpendicular cuts, armpit-to-armpit and hip-to-hip. Donald teased the skin from the muscle, pulled the skin flaps open, and Emily pinned them to the corkboard. He pulled back the muscle (again, Emily pinned) so they could view the organs: stomach, lungs, three-chambered heart.

Donald peered into the body of the frog, splayed open on the corkboard. “Have a look, Mom?” He offered the magnifying glass, polished clean. He kept it in a box, wrapped in chamois. “You can see the liver here.” He nudged it with the tip of his scalpel. “These triangular things. And the stomach is this tube. I’ll cut it open. Maybe there’s a fly in there or something.” He consulted his book. “This is the small intestine.” He prodded a tangle of small coils. “I’m going to remove the digestive system so we can see the lungs and the heart.

I wish that I could breathe through my skin,” said Donald. “That’s why a frog only needs three chambers in its heart, you know. Because it processes gasses through its skin. Oxygen in. Carbon dioxide out.”

Through salt water and waste my child breathed within me, floated in me, breathed through what would one day be his skin. But he led no double life. Like a tadpole, not a frog. He couldn’t have lived outside me then, couldn’t have breathed air, barely had lungs, a nose or mouth.

“What do you think our skin does, besides protect our muscles and organs?” I asked.

(What does our skin do besides contain us? Besides define the borders of our bodies?)

“That’s a lot,” Donald said. “What if we didn’t have skin? We’d be gooey bloody creatures, dripping and oozing. We’d be raw meat.”

Emily read aloud. “The skin is the body’s largest organ. Among other things, it senses pain, which communicates to the brain that the body is vulnerable to danger. The skin can serve as a warning system. Skin also regulates temperature,” she added. “It produces sweat to cool us, or shivers to warm us.”

But human skin doesn’t breathe. What is it like—what does it mean—to breathe through skin? Skin cells swell when they’re well hydrated, but human skin is waterproof, too. Such a strange coat.

Donald unpinned one hind leg so he could move it and watch the knee joint. Emily unpinned the other. Together, giggling, they worked the legs as if the frog were swimming a lazy backstroke.

A frog’s ear has no external structure. Two ridges on the sides of its head. Two holes. Two tympanic membranes. A higher voice vibrates the tympanum more rapidly.

In the woods, Donald and Emily compared the fascicles of pine needles. Bundles of two. Bundles of five. White pine. Norway pine. Red pine. Jack pine.

I did not watch them all the time. It was safe there, at the lake. There were artists and writers working in their nooks, their cabins, at the water’s edge. The lake itself was the greatest danger, but they were both strong swimmers.

It was an experiment. Donald said.

Emily took the pins out. Donald closed the flaps of skin and muscle. He lifted the frog from the corkboard.

Using your scissors or scalpel, slice the jawbone at the corners on both sides of the mouth. This will require some pressure: you're cutting through bone. Now you can open the frog's mouth wide. You should be able to examine the nostrils on the roof of the mouth, the throat and esophagus.

They were not very scientific about it—the experiment. They took a scarf from the hook in my bathroom—pale blue silk. The chloroform was in a brown glass bottle. Weston had given it to them so they could collect insects and small animals for dissection.

Lift the tongue with the tip of your blade. Note how it is attached at the front of the mouth instead of at the throat. The tongue of a frog is magical—a long, flickery tool for snatching insects from the air midflight.

Pine needles. Midden. Loose scales of last season's pinecones. He tied her hands loosely in her lap, with a double wrap of rope borrowed from the boathouse. He tied the damp scarf over her mouth and nose. *Breathe deeply.*

A whisper vibrates the tympanum so slightly. The tiny hairs of the inner ear shiver.

She closed her eyes. *You are getting sleepy.* Donald stroked her hair. *So sleepy.*

Cut into the skin of the frog's inner thigh. With tweezers, pull the skin back, peeling it down to the knee so that you can explore the muscles of the frog's leg.

He untied the blue scarf, slid it away and touched her face. Her mouth was open. Her breath against his cheek. Unbuttoned a vertical line of buttons. Touched the perpendicular wave of her collarbone. Peeled back the flaps of her dress—not muscle, not skin—dissecting the smooth, washed-soft cotton. Her skin was dry and powdery. Three moles in line on her sternum, like spots on dice. Two small pink nipples, not so different from his own. His fingers were the scalpel, the tips of the tweezers. He drew a line from hip to hip along the elastic band of her underwear. Ran the palm of his hand across her stomach. Counted her ribs.

When Donald was four, I found him in a closet with the neighbor boy, also four. I reached for a tablecloth on a high shelf and heard them laughing. They were naked and crouching behind a row of winter coats. The neighbor boy clutched a wooden truck. I pulled them out by their wrists, one at time, smacked their bottoms. My palm stung. *Where are your clothes?* The neighbor boy bubbled with high-pitched giggles. He zig-zagged through the kitchen, a wild animal, so small and pink and laughing. But Donald sat on the floor at my feet. Donald cried.

Her breath against his cheek. *Emily,* he said, insistently, but she didn't wake. A line of sweat on her forehead. Donald held her hand, rubbed at it anxiously.

Unpin the frog and turn it dorsal side up. Cut a small rectangle in the skin on top of its head, beginning near the nose, between the eyes.

A child lives a double life. An adult body still houses a child.

Two children, (boy/girl), each with bony shoulders, and nearly identical flat chests. They measure themselves against each other, back to back. Each to the other, they press their matching spines. They play each other's like piano keys.

In the forest, they find a hoof and a deer spine, picked clean, the vertebrae in a line like a puzzle, a row of dominoes set to clatter. So like their own knuckled spines.

They open their mouths. Press each other's tongue with a depressor stolen from Weston's leather bag. *Say ahhh*.

Blooming garden of tastebuds. Dark tunnel of the throat. *Ahhh.*

The leopard frog will eat anything it can swallow: ants, bottle flies, spiders, beetles, etc. The tongue unfurls, catches its prey, then flings the morsel into the frog's throat.

Her shallow breath against his cheek. *Emily,* he says.

More loudly. *Emily.*

Remove a patch of skin from the skull to make a portal through which you can remove the brain, but don't press too hard or cut too deep. Avoid slicing into the brain so that you can examine it whole.

There was to be a talk that evening at the lodge. A watercolor artist would discuss his techniques and show his work. I wanted Donald and Emily to help move chairs around in the living room so there would be room for more people to sit. I called to them from the back porch.

Possible Effects of Chloroform on Human Beings (when used as an anesthetic or to induce deep sleep)

1. Possible nausea and vomiting
2. Unconsciousness
3. Skin rash or lesions where skin has made contact with the liquid
4. Brain damage
5. Kidney and/or liver failure
6. Death

He came running from the woods. Explaining something and pulling my hand, but I couldn't understand what it was. *An experiment. An experiment. Breathing too fast.*

When we got to her, she was awake and sweating. Her eyelids were heavy, but she sat up and smiled at us, a slow smile. She said she saw perfect things. *Tied to a*

clothes line. A cork jacket and a paddle. An upside down bouquet. They drifted before me and turned round. They danced with each other. She sighed. *I have such an awful headache.* She lay back down.

Donald and I helped her back to the lodge. I gave her a glass of water with mint. She sat on the sofa and pressed a cold compress to her forehead. Her buttons were mismatched with their holes. *Let me help you.* One of her shoes was untied. I unbraided and rebraided her smooth hair.

We wanted to know what it was like. Donald said. *I was going to try it next, after she woke up.* He fluttered his hands as if there were something sticky on them.

Donald. Bring me the chloroform. A brown glass bottle. I poured it down the kitchen sink and rinsed it.

The frog was on the back porch, still pinned to the corkboard, drying. One forelimb was folded in over the muscle as if the frog was covering its own heart. It was brown now, the skin flaps brittle leaves. Nothing about it looked as if it had ever been alive.

I sent Emily home to her mother, who never came by, never said a word.

The next winter, Donald died from an infected root canal. Weston and I returned to the lake only once. Emily was there, a few inches taller, her hair longer, but still stick

straight, a gangly girl, only twelve. I watched her standing at the shoreline, skipping stones or sitting on the pier, but more often she was on the porch of her family cabin reading books.

I paddled with her one afternoon, across the lake to the rock. We did not speak much, but she said that she missed Donald. That no one tested the echo anymore. We reached the rock and paddled close enough to inspect the pictographs. The gray rock is streaked red with iron that bleeds like an error, like haphazard city graffiti, but some of the marks are animal shapes with backs like combs, with teeth, the hollow forms of beasts. And between them are small pocks of darkness, holes plugged with offerings of sap.

Emily leaned out of the canoe and pressed her mouth to a hole. She whispered something I could not hear, then turned to press her hands and her ear to the rock, as if to hear an answer whispered back to her. Maybe there were other voices caught there—ancient ricochets and murmurs that only she could hear.

Do I remember him inaccurately? Do I exaggerate his wit, his tenderness? He was incomplete. In remembering, I also create him; I fix him in my mind. A boy who lives refuses to be pinned down, eschews delineation, is never fixed in the silver of a photograph. But a boy who dies is unchanging.

In my memory, he is like a charcoal drawing—a few hasty strokes, some color, the implication of volume, of moving fingers, each with a trimmed nail. Blond curls. One dimple. Small white teeth like pearls in a garden. The fine hairs upon his arms shine. On

his knee is a faint scar, a kidney-shaped patch of nubbled skin—evidence that he learned to ride a bike, and that it was not easy. He ripped off the band-aid and it left an outline of gray gum. He picked at the scab. For days, he watched its perimeter shrink inward as it healed, like a lake evaporating in the desert. He inspected the visible pores with his magnifying glass, the stippled topography of the scar, one inch wide, curved below the inside of the right knee cap, two and half inches long.

3.

Cleveland, Ohio

1923

THE SKIN OF A RABBIT

If mankind be now passing through the third great transition forward—the first be the development of the thumb, perfecting the hand; the second, the development of the stone implements, and this, the third, his mastery over his parasitic enemies—an opportunity has come to the members of the medical and dental professions, infinitely greater than to any other of the sciences of mankind, to contribute to man's upward march to the position of a superman.

Dr. Weston Price, *Dental Infections: Oral and Systemic*, 1923

1.

The crown of the tooth is the part you see, white and strong like bone, although it isn't bone, but rather dense layers of tissue. The root holds tight in the jaw like a mandrake. An abscess is an infection around the root, formed when bacteria gnaws its way into the tooth, and then out of the tooth and into the surrounding tissue. Bacteria burrows and devours and makes for itself a small new space in the gums. And in this little cave, rot blooms.

As a young dentist, I had a secret idea that an abscess was evidence of larger vacancy. That it was the place where one's spiritual disease materialized, leaking from the tooth and gnawing outward, as if teeth were spirit chambers, tiny vessels of good and evil.

When my son Donald was twelve years old, decay burrowed into his tooth and out again. The bacteria leaked into his gums, forming an abscess around the tooth. He was still very much a child, more bone than flesh, and had not even shed all of his

deciduous teeth. Of course I know that all mouths foster microbes from the minute they leave the clean, salty ocean of the womb, but still, Donald's caries surprised me. Mouths are constantly busy chewing and salivating and speaking and licking and kissing and sucking, but my child's teeth seemed too new to host such swarms of bacteria.

Once, years before my son grew ill, before he was even born, I looked across the breakfast table at my wife Florence, and I had a vision of her decay. We were eating grapefruit, shipped by rail from Florida, and for a moment, as Florence lifted the spoon to her mouth, I saw her face as if it were a diagram, each part labeled and transparent, each layer visible beneath the other layers. My wife is a soft woman, with full cheeks and sloping shoulders, but that morning she looked too soft, lacking in structure. I saw, or imagined I saw, straight through the spongy flesh of her cheeks and into her mouth where each tooth was surrounded by a swarming nest of germs. I saw her entire mouth as a network of rotted out caverns. She put the section of grapefruit into her mouth and began to chew and I blinked. The vision evaporated. Florence was again opaque, with smooth full cheeks and shallow creases around her gray eyes, a fuzz of pale hair along her upper lip.

Florence's mouth is not rotten. If it were, I would smell it on her. When she leans close to kiss me goodnight. When she wakes me in the morning, whispering into my ear, I would smell the sweet, slick scent of meat and mothballs, that fetid buzz of decay. But it isn't so: her teeth are anchored firmly in her jaw, solid and strong. Her pink gums nestle close against them. There is no gnawing blackness around the roots of her teeth, not in her jaw, not in her heart. My wife is not vacant.

But back then, I thought that a rotten tooth was the dwelling place for what is worst in each of us. That an abscess formed in moments of lust or rage. Those moments in which one doubted God (His goodness, His existence), and that in the abscess, these moments swelled like bubbles. Back then, I thought that the abysmal soul was a growing blackness expanding around the tooth.

My wife looked up from her food and saw me staring. *Time for a cleaning?* I said. I wiped sweat from my upper lip. It had only been two months since her last dental exam. Rightly, she protested. If there had been the beginning of even a single spot of decay, I would have seen it when I cleaned her teeth. I would have picked at it with my tools and watched her wince. On that morning, as I ate my grapefruit, I squeezed my eyes shut and tried to forget the caverns I had glimpsed.

Our Donald had wide lips, smooth cheeks, and double-folded eyelids. He had small white teeth and carefully filed fingernails. He was golden and taut and far more beautiful than his mother or me. His voice had the melodic wooden sound of a xylophone.

At our lake house, Donald drank lemonade at the neighbors'. He snuck hard candies from the bowl Mrs. Olsen left on her table. She knew that he stole them, and that he was not permitted candy, but she pretended not to see. She restocked the bowl each time he came over, and conveniently looked away. Sometimes his mother fed him strawberry jam on toast. He ate birthday cake and ice cream and Fourth of July blueberry pie. But I don't know what, exactly, caused the decay. After he died, I made a list of the foods he had eaten regularly. I checked the dates of his dental cleanings. But these

records told me nothing. There is sugar in beets, in beef, in milk, in bread. In raisins and snap peas and lettuce. And my child had hosted that lacy darkness, that wormhole of decay, and he did not tell me about his pain. The bit of rot like a puncture in the skin of an apple, a tiny dent, a dimple in a crease in the tooth.

One night at dinner he ate four bites of peas, cut his steak with his fork and knife as he'd been taught, set the knife down, switched the fork to his right hand, speared the steak on a tine, took one small taste, and set his fork down. *I don't feel well*. His mother pressed the back of her hand against his forehead. *You don't seem feverish.* But he would.

I did not know every inch of my child's body. I knew his knees and the dimples there that dissolved as he grew and his legs got lean. I knew his skin grew golden in summer. But I did not know his ears—were his lobes attached, like his mother's? Or detached, like mine? I cannot remember. I never knew. I did not know the pattern of freckles on his shoulders. I know his eyes were blue, but I cannot remember the exact shade. His hands? Did he have his mother's brittle nails? His elbows were smooth: his mother rubbed them with butter when he was a baby. I knew his teeth, and that he had lost exactly half of his deciduous teeth when he died. I knew he would have had only two wisdom teeth, on the top. That the other two would never grow in. He had my family's teeth. My brothers—nine of them—smile with identical, square-toothed smiles. I am the only brother that keeps his mouth closed when photographed, my teeth lost to Typhus when I was young, and although I am fitted with an excellent pair of dentures, I have found my own smile quite foreign ever since. Donald had the grin of my youth.

In bed after dinner, Donald's pain was worse. His mother made him ginger ale for the fizz. She stirred it slightly, but when he sipped from it we saw him wince.

It's your throat?

My teeth, he said, finally. *My teeth hurt.* He touched his jaw on the right side.

When I looked, I found his gums swollen, one tooth raised slightly above its neighbors, and a tiny tunnel through the left premolar, a deciduous tooth, primary and impermanent. A tooth that would be pushed out within the next couple of years, hardly worth the trouble of filling, but permanent teeth are more likely to grow in straight and solid if they follow the path of their deciduous predecessor. And back then, like all of us dentists, I thought it best to dig out the rotten pulp, and seal the tunnel off. Fill the tooth with silver or porcelain until the adult tooth pushed it out and took its rightful place. Fresh and solid and pure.

Canals are for boats. Barbs and hooks and worms are for fishing. But the next morning, I fished in Donald's tooth. It welled over with pressure, and I snagged the pulp and watched one of my child's feet twitch against the chair, the way I have seen chickens twitch in their last minutes, after their necks are broken and their legs are busy following through on residual messages sent by the brain. While I worked on his tooth, Donald was lost in the gray world of anesthetic, a drifting shade. He wandered through the underworld, sipping icy lemonade in the shadow of an elm, the cold glass condensing in his hand. I finished my work and Florence came in. She smoothed his hair off his forehead and pressed a cool, damp cloth against it. We watched his narrow chest rise and fall. The tooth was hollow now. I thought there would be nothing left to feed the hungry microbes.

Donald was our only child. We could not have another. He had been born purple-gray and silent. For minutes after the doctor pulled him from my wife's body he did not breathe. And then he did. And he went on breathing for ten years. How many breaths, I wonder? Even if we had seven children, even if we had ten, we would have loved Donald. But he was the only one.

I read the newspaper, and Donald brought me a handful of raspberries he had picked in the yard. He helped his mother roll out a piecrust. He sang in the bath, and all over the house we could hear his nonsense songs about soap bubbles, about animals, about bicycles. The songs merged *(Oooooh! A giraffe on a bike is the keenest of sights. Its legs too long to pedal!)* He sang songs from church and put his face into the water to blow noisy bubbles.

Sometimes, on Sunday afternoons, I took him to fly a kite at Melrose Park. I held the string and backpedalled uphill and he ran downhill, holding the kite above his head until it lifted, lifted and rose. I unfurled the string as quickly as I could and Donald would shout. His hands were still raised above his head although the wind had taken the kite from him a full minute ago. Once, the kite string broke, and the kite flew off. As we walked home Donald took my hand. *I wonder what adventures our kite is having,* he said.

Why didn't he tell me? I asked and asked. Was he afraid of me, his father? Afraid I would be angry? Did he think the pain might go away on its own, drying up like the flu or the chicken pox? Did it come on suddenly? Maybe he hadn't even noticed it until it grew overwhelming. Maybe my child had a uniquely high tolerance for pain.

I was a stern father. We all were, the fathers of Cleveland, Ohio. The fathers of Rochester, New York. Of Detroit and Toronto. The fathers of Montreal or Grand Forks. My own father was a taciturn man. A wheat farmer who did everything with utmost efficiency: he spoke rarely, ate swiftly, opened and closed doors silently. He was fastidious about lubricating rusty hinges. And although I was not a farmer, he taught me that to be a man means to have only doors with silent hinges.

The word *Sepsis,* from Greek, means the decomposition of animal or vegetable organic matter. The verb *sepo* means "I rot." Homer used it in *The Illiad*, though he used it in the negative to say that Hektor's beloved body did not rot after Achilles killed him. Priam, Hektor's father, begged for news of his son's body, which Achilles had been dragging from the back of a chariot, making circles in the dirt. The messenger reported that the body remained dewy-fresh; its resistance to rot was surely evidence of the gods' love for him. "*Old sire,"* says the messenger. "*Not yet have dogs and birds devoured him, but still he lies there beside the ship of Achilles amid the huts as he was at the first; and this is now the twelfth day that he lies there, yet his flesh decays not at all, neither do worms consume it, such as devour men that be slain in fight.*"

But the worms began to gnaw at my Donald even as he lived. On the morning of the second day after the root canal, he was out in the yard with a magnifying glass, his cheek swollen, but that was to be expected. Just that once, he was allowed chocolate pudding for lunch and mashed potatoes for dinner. On the morning of the third day he stayed in bed with a book, but it was raining, so his mother and I thought nothing of it. It was a good day for reading, and for letting one's mouth heal.

But then he was fever-wracked and dying. I held his hand. I watched his heart beat in his neck—too fast. In his pale wrist I saw the blue-veined twitch of his pulse. His thin chest thudded, his blood still pumping, circulating from his heart to his wrist to his fingers, and back around. He moaned and we called the doctor, who tried to drain the pus, to sterilize the infection in his mouth, but already his blood was rife with it. He was gone from us already, watching another world. I pray he did not watch flames, but rather clouds, or giraffes riding bicycles. The sweat that coated his forehead dried. He was flushed and burning. His lips were ringed with salt. His cheek was so swollen that he looked like someone else's child. I held his hand. I knew so little. The sun set on the fifth day. Our Donald never opened his eyes again.

2.

These researches have required the use of approximately five hundred rabbits a year, for several years; and, for those who would criticize their use, I wish to state that many of these rabbits have in my judgment made a far greater individual contribution and service to the welfare of humanity than hosts of human beings. Rabbits that run wild and are chased by their enemies have not been as well fed and as happily housed, or been privileged to die under chloroform. I have had many patients express their gratitude and confidence by offering themselves for any experiments that I would care to try upon them, if, by so doing, they too could help humanity.

Dr. Weston Price, *Dental Infections: Oral and Systemic*, 1923

Each day, our teeth bathe in jam and apple juice, in broccoli and potatoes and ribeye steak. How does that one little particle, minute and nearly invisible, take hold, fester, and bloom? It destroys its host tooth, spreading to other teeth, burrowing towards the gums, the root, the jaw. A little sweetness gone awry, it builds itself an elegant cave, ruffled and brown.

A woman came to my office in a wheelchair. For years she had been disabled by severe arthritis, but this had nothing to do with her visit, she thought. I thought. No, she was there because she thought she might have a cavity. Nothing major, she said. An ache in one tooth. And since she was there, I might as well go ahead and clean her teeth, too. It had been awhile, she said.

I took notes on her dental history. Years earlier, she had gotten a root canal, she said. No problems since then. Her filled tooth did its job just fine. I looked into her mouth and everything looked healthy. But I had this idea. Donald's mouth had grown infected immediately after the root canal, before his mouth had even healed. I thought, just maybe, that infection lingered even after the pulp had been mined from the tooth, and that maybe these lingering infections went undetected for years. The tooth would be the center of operations, the home base of the infection, but the bacteria might sneak around, slip into the bloodstream, penetrate the bones, prowl in the tissues, wreak quiet havoc in the body. I said that I would pull her tooth.

Why? she asked. *Is it infected? Is that possible? There's nothing left in it. My old dentist explained it to me. He dug out the pulp and replaced it with silver and tin.*

Yes, I said. *Yes. That's absolutely correct, but it's infected nonetheless. A little pocket of infection round the root.*

Although in truth I could see no signs of infection. No pus, no redness, no swelling. I rinsed the hole with 27 chemicals and sent her on her way. I kept her tooth and rinsed it of blood and saliva, but I did not disinfect it.

I had nine rabbits in three hutches in the yard. I had started with a single pair that Florence and I thought we'd raise for company or stew, but now there were nine. I tried to keep them separated by sex. Nine was enough for the time being.

Rabbits look squat and round, but they have long spines. Laid bare of muscle and fat and skin and fur, you can see the different types of vertebrae—at the top, thin and bladelike, and chunky along the arc of the back. A live rabbit, however, with skin and flesh and ears and cottontail, is the softest thing. Its heart beats quickly—much faster than a human heart. And rabbits are so easily scared.

For that first tooth, I chose a calm brown creature. It had no name. I never named the rabbits. I lifted it by the neck, supporting its soft weight with my other hand. Florence stroked its ears, then held it down on the table so that it couldn't kick. We watched its whiskers shiver.

Its heart is racing, Florence said.

I made a tiny incision at its shoulder, between jaw and scapula. I cut through the fur and the dermis, but not into the muscle. I separated the skin from the muscle, made a little pocket between them, and with the tip of my scalpel I inserted the tooth. I sewed the pocket closed with red thread, and snipped the line. Florence dipped the creature's ear in pink dye and returned it to the hutch. *Sweet thing*, she murmured. *Noble beast.* It hopped to the back corner. The other rabbits ignored it, as if they felt betrayed.

I have heard that the Japanese look at the moon and see a rabbit where we see a man—its long, curved torso tipped back, its ears upright. They say the moon is populated with rabbits busy making sweet rice cakes. And at the lake where Florence and I built the

inn, back when we were young, before we had Donald, there was a rock wall that the Ojibwe people painted with streaks of red iron. They drew portraits of Nanabush, the long-eared trickster who named the things of their world the way Adam named the things of Eden. They say Nanabush visits in the shape of a rabbit.

In three days, that first rabbit aged a lifetime. With the tooth beneath its skin it grew stiff and slow. It did not run from me when I opened the hutch. It burned with fever, beat an erratic pulse, and refused to hop. It soon died. But in the meantime, my patient, the one in the wheelchair, the tooth donor, pushed herself up out of her wheelchair, took a few slow steps across her kitchen, and prepared herself a cup of tea. It was the first time she had walked in seven years. Of course, I wasn't there for the miracle moment, but she came back to see me at my office. She walked right into my office and shook my hand.

All these years, she said. *It was the tooth. All these years.*

The skin of a rabbit is somewhat loose, easily sliced with a paring knife or scalpel. Again and again, I pulled the skin away from the bone and inserted the tip of the blade, jerked it upward just a bit, made an inch-long incision, tucked a tooth beneath the top layer of flesh like a pat of butter beneath the plucked, nubbled skin of a turkey. I harvested teeth from a man with heart disease, another woman with rheumatoid arthritis, two men blinded by eye lesions, a man who had suffered a stroke, another with kidney failure And each rabbit grew sick and died, of heart disease or rheumatism or kidney failure. Each rabbit died from the disease carried on the tooth it was given. So I pulled healthy teeth, too. The backmost molars and wisdom teeth. I lied a little. I told my

patients that the teeth I pulled were rotten. And I went to the morgue. These corpse teeth I sterilized. And these rabbits, the ones with clean teeth beneath their skin, lived happily with the lump in their shoulder. They ate and slept and hopped and happily bred. These rabbits lived.

I needed more rabbits, and one thing about rabbits is they make plenty more rabbits. The newborn kittens were hairless, gray and pink, tiny. Two or three of them could rest in my palm at once. Like mice, bald and quivering, with curled paws. Horrible, blind, naked little things. But when they yawned, it didn't matter that they were hairless and strange. When they yawned, they looked like human babies. Sleepy and warm. And in only a few days, their fur grew velvety. Sometimes they fought. And they ate their own droppings. But at two weeks a rabbit is one of the most perfect creatures I have seen.

Animals are not wise in the ways that human beings are wise, but they are wise in the ways of nutrition. While we eat the tender muscles of our prey—their haunches, their shoulders, their rumps—animals eat what they need. Lions, for example, will tear open the abdomen of a fallen zebra and devour the liver, leaving the rest of the beast for the jackals. The assumption, which has been widely applied in zoos, is that lions need extra iron if they are to reproduce effectively.

In winter, rats dug a hole through my rabbit hutch and killed four of my animals, draining them pale and bloodless. They dug out the eyes and ate them. Gnawed a hole in each rabbit skull and sucked out the brains. The plump rabbit bodies were sunken and dry, but still covered with perfect fur, untorn and unshredded, their fat and flesh untouched. And this is how I learned that the eyes of a rabbit are rich in vitamin A,

something a winter rat lacks. Rats cannot name what their bodies crave, but they know intuitively where to get it.

3.

The role of an iconoclast is seldom, if ever, a happy one.

Dr. Weston Price, *Dental Infections: Oral and Systemic*, 1923

When I was a child, I prayed with fervor. Beside my brothers, I knelt each night, all of us on our knees, our heads bent. We did not pray aloud, did not recite the Lord's Prayer in unison, but each held his own conversation with the Heavenly Father. I prayed that I would be a great man, although I did not know what it meant to be great, or what kind of greatness I wanted. It wasn't wealth, and it wasn't acres of wheat or cattle or hops. I didn't want to be a farmer like my father. For a time, I thought I'd be a pastor, so I asked for great knowledge, great faith. But at the end of each prayer, I asked the Lord to do what He thought best. To use me in the way I could be most useful. I am your servant, I said. Make me great for you.

The Lord took my son. And He took rabbit after rabbit. And in this way, He showed me that root canals are a deadly practice. But few believe me. I published a book about my findings, but the people have stopped their ears to me. They write falsehoods that contradict what I know to be true. They call me a quack, and I am no longer the president of the dental association.

Many people will suffer. Many people will die unnecessarily.

Now, I pray that they will hear me. I ask God to lift the veil that covers their eyes,

to unstop their ears. I have written all that I can.

At a convention in Michigan I dined with a group of colleagues. One of my companions assured me that he could fill ninety-five percent of molar roots perfectly to the apices. At this time—it was 1924—I had not yet written my book, but I was already skeptical of the root canal process. The root of a tooth is a narrow little chamber, and no matter how skilled the practitioner, it is quite impossible to fill a tooth to its very apex. Instead, we dentists leave a tiny, unintended gap, and in this space the bacteria continue to fester, further destroying the gums and jaw, or even worse, involving the lungs or the heart or the joints. This little pit of bacteria destroys the body. It is best to pull the entire tooth. An improperly filled root canal is a matter of life and death.

I challenged my friend, but not because I thought he was incompetent. In fact, he was a wonderful dentist, careful and smart. Truly, I believe his work was above average. And being a man that took great pride in his work, he held his ground, declaring that he could do it. He could fill a tooth most perfectly. So we agreed that I would cast a set of teeth for him, in Plaster of Paris, and he would demonstrate his expertise by filling them. We undertook this little experiment, and s*uffice it to say that he did not have five percent of them properly filled to the apices, and in about twenty-five percent he penetrated the root.* (47)

I injected rabbit ears with the bacteria that live around a tooth, that multiply in the abscess. The animals developed arthritis and spinal lesions. Like Donald, they died of heart involvements. The bacteria on infected teeth lead to lung involvements or

tuberculosis. The bacteria of an abscess poisons the entire body. The cluster of bacteria fights for survival, multiplies, devours the gums, the jaw, the cheek, burrows outward toward the light. It happens to some that the bacteria chew outward, entirely through the cheek. The soft flesh feeds them. And it happens to others that the infection settles in the joints. Or it hitchhikes through the blood, along the highway to the heart. Infection settles like spores in the lungs. But I know that an abscess is an infection of the flesh, of the blood, of the pulp of the tooth. It is not an infection of the soul. There was no vacancy in my son. Had Donald lived, he would have been a man full with wisdom. He would have been a crowded man. I should have pulled that tooth.

I had 40 rabbits in 4 hutches when the tornado struck. It was a Sunday afternoon in June, muggy and quiet. Florence was weeding the garden, and I was reading on the back porch with a cup of tea, and the sky filled with puffy clouds. Darker and darker it swirled, and when the gray turned green, we knew to head to the cellar. We took a kerosene lantern, some crackers, apples and cold chicken, a jug of water. I was pulling the cellar door closed when Florence said *The rabbits, Weston.* She pushed past me, heaved the doors open, and ran across the yard to the hutches. Because I knew I could not stop her, I followed. We made three trips, back and forth, each holding three rabbits per dash. On one trip I managed four, two hanging from each hand, their bodies stretched and dangling from their scruffs. They didn't even kick, the terrified creatures, but hung silent and dumb. Florence wanted to go again, but we heard the twister coming—a low, fierce roar—and the sky to the west was nearly black. I pulled the cellar door shut and I slid the wooden plank through the handles.

The ten rescued rabbits nestled in a corner, piled together and sniffing at each other as if meeting for the first time. A single fat beast hopped away from the group and Florence reached for it. She held it on her lap and stroked its ears.

A rapid clattering against the outside of the house, and banging like doors slamming. A crack like a baseball against a bat. Like the bat splitting. The twister was close, whirling tarpaper and planks at our house. Hurling nails and garbage and untied shoes. Spitting rocks and shingles like the teeth of a boxer. And then it was gone.

The rabbits had not left their corner. In the silence, Florence hugged her rabbit to her chest.

When we went back out into the yard, the sky was pale yellow and gleaming. Young looking and scoured. Broken tree limbs were scattered in a line and electrical wires swung low from poles that tipped at strange, parallel angles all along the street. In one hutch, three rabbits were dead. The others in that hutch were huddled as far from the dead animals as they could get, as if death was catching. But worse was one of the hutches laying on its side, the door torn from its hinges and the rabbits gone, their straw bedding gone, their food pellets and bits of lettuce and droppings and water dish gone. I pictured the animals in the eye of the twister, ten brown rabbits, swirling like water in a drain, eyeing each other across the storm, spinning with straw and tree branches and flowers and chairs and spoons and tricycles. And when the funnel lifted, had it set them down gently? Freed them to find each other again, reborn to sniff each other, damp and blinking and free in a grassy field? Or had the wind torn their fur from their backs, from their tender throats, from their bellies where it was thickest, and spit their bodies out

naked, the fur floating behind them, behind their heavy, breaking bodies, the fur drifting like seeds from a dandelion wish?